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Economic Report of the President

Transmitted to the Congress

January 1987

TOGETHER WITH
THE ANNUAL REPORT
OF THE
COUNCIL OF ECONOMIC ADVISERS

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ECONOMIC REPORT
OF THE PRESIDENT

ECONOMIC REPORT OF THE PRESIDENT

TO THE CONGRESS OF THE UNITED STATES:

For 6 years, my Administration has pursued policies to promote sustained, noninflationary growth and greater opportunity for all Americans. We have put in place policies that are in the long-term best interest of the Nation, policies that rely on the inherent vigor of our economy and its ability to allocate resources efficiently and generate economic growth. Taming the Federal Government's propensity to overtax, overspend, and overregulate has been a major element of these policies.

THE CURRENT EXPANSION

Our market-oriented policies have paid off. The economic expansion is now in its fifth year, and the growth rate of the gross national product, adjusted for inflation, should accelerate to 3.2 percent in 1987. By October, the current expansion will become the longest peacetime expansion of the postwar era.

Since the beginning of this expansion, the economy has created more than 12 million new jobs. In each of the past 2 years, the percentage of the working-age population with jobs was the highest on record. Although I am encouraged by the fall in the overall unemployment rate to 6.6 percent in December 1986, I will not be satisfied until all Americans who want to work can find a job.

Our efforts to reduce taxes and inflation and to eliminate excessive regulation have created a favorable climate for investing in new plant and equipment. Business fixed investment set records as a share of real gross national product in 1984 and 1985, and remains high by historical standards.

Despite the economy's tremendous gains in employment and production, inflation has remained below or near 4 percent for the past 5 years and, in 1986, declined to its lowest rate in 25 years. Although last year's low inflation rate in part reflected the substantial decline in energy prices during 1986, we expect inflation in 1987 to continue at the moderate pace experienced during the first 3 years of the expansion. The financial markets have acknowledged our progress in reducing inflation from its double-digit levels, and interest rates declined during 1986, reaching their lowest levels in 9 years. To sustain these developments, the Federal Reserve should continue to pursue monetary and credit policies that serve the joint goals of growth and price stability.

In short, since 1982, we have avoided the economic problems that plagued our recent past—accelerating inflation, rising interest rates, and severe recessions. Production and employment have grown significantly, while inflation has remained low and interest rates have declined. This expansion already has achieved substantial progress toward our long-term goals of sustainable economic growth and price stability.

THE ECONOMIC ROLE OF GOVERNMENT

Government should play a limited role in the economy. The Federal Government should encourage a stable economy in which people can make informed decisions. It should not make those decisions for them, nor should it arbitrarily distort economic choices by the way it taxes or regulates productive activity. It should not and cannot continue to spend excessively, abuse its power to tax, and borrow to live beyond its means.

The Federal Government should provide certain goods and services, public in nature and national in scope, that private firms cannot effectively provide—but it should not try to provide public goods and services that State or local governments can provide more efficiently. When government removes decisions from individuals and private firms, incentives to produce become dulled and distorted; growth, productivity, and employment suffer. Therefore, to the greatest extent possible, the Federal Government should foster responsible individual action and should rely on the initiative of the private sector.

TAX REFORM

My 1984 State of the Union Message set tax reform as a national priority. After more than 2 years of bipartisan effort, we achieved our goal last fall when I signed into law the Tax Reform Act of 1986. Tax reform broadens the personal and corporate income tax bases and substantially reduces tax rates. These changes benefit Americans in at least three ways.

First, by reducing marginal tax rates, tax reform enhances incentives to work, save, and invest. Second, by reducing disparities in tax rates on income from alternative capital investments, tax reform encourages more efficient deployment of investment funds. Investment decisions will now reflect the productive merits of an activity more than its tax consequences, leading to a more efficient allocation of resources, higher growth, and more jobs. Finally, tax reform makes the tax system more equitable. The simpler, lower rate structure will make compliance easier and tax avoidance less attractive. Americans will know that everyone is now paying his or her fair share and is not hiding income behind loopholes or in unproductive shelters. Tax reform will especially benefit millions of working poor by removing them from the Federal income tax rolls.

REMAINING CHALLENGES OF ECONOMIC POLICY

We have successfully reformed the tax code, controlled inflation, and reduced government intervention in the economy. The result has been an expansion of production and employment, now in its fifth year, which we fully expect will continue with greater strength in 1987. Although much has been accomplished, we must and will address the remaining challenges confronting the economy. We must continue to reduce the Federal budget deficit through spending restraint. We must reduce the trade deficit, while avoiding protectionism. We must strengthen America's productivity and competitiveness in the world economy. And we must reform our costly, inefficient, and unfair agricultural programs.

Control Federal Spending

For the first time since 1973, Federal spending in 1987 will fall in real terms. As a result, the Federal budget deficit will decline from its 1986 level by nearly $50 billion. My budget for 1988 continues this process by meeting the Gramm-Rudman-Hollings deficit target of $108 billion.

Deficit reduction must continue and must be achieved by restraining the growth of Federal spending—not by raising taxes, which would reduce growth and opportunity. Large and persistent Federal deficits shift the burden of paying for current government spending to future generations. Deficit reduction achieved through spending restraint is essential if we are to preserve the substantial benefits of tax rate reduction and tax code reform; it is also essential for reducing our international payments imbalances. Finally, spending on many programs exceeds the amounts necessary to provide essential Federal services in a cost-effective manner.

Besides exercising spending restraint, we must reform the budget process to build a check on the Federal Government's power to overtax and overspend. I support a constitutional amendment providing for a balanced peacetime budget, and I ask the Congress to give the President the same power that 43 Governors have—the power to veto individual line items in appropriations measures.

Maintain Free and Fair Trade

One of the principal challenges remaining for the U.S. economy is to reduce our trade deficit. However, we cannot accomplish this, or make American firms more competitive, by resorting to protectionism. Protectionism is antigrowth. It would make us less competitive, not more. It would not create jobs. It would hurt most Americans in the interest of helping a few. It would invite retaliation by our trading partners. In the long run, protectionism would trap us in those areas of our economy where we are relatively weak, instead of allowing growth in areas where we are relatively strong.

We cannot gain from protectionism. But we can gain by working steadfastly to eliminate unfair trading practices and to open markets around the world. This year, I will continue to press to open foreign markets and to oppose vigorously unfair trading practices wherever they may exist. In addition, I will ask the Congress to renew the President's negotiating authority for the Uruguay Round under the General Agreement on Tariffs and Trade. These talks offer an important and promising opportunity to liberalize trade in areas critical to the United States; trade in services, protection of intellectual property rights, fair rules governing international investment, and world trade in agricultural products.

More remains to be done to end our trade deficit. We must sustain world economic growth, increase productivity, and restrain government spending. For U.S. exports to grow, the economies of our trading partners must grow. Therefore, it is essential that our trading partners enact policies that will promote internally generated economic growth. At the Tokyo Economic Summit last year, the leaders of the seven largest industrial countries continued efforts, begun at the Versailles Economic Summit in 1982, to increase international coordination of economic policies. We must also continue to encourage developing countries to adopt policy reforms to promote growth and restore creditworthiness.

Here in the United States, we must restrain government spending. Our trade deficit in goods and services reflects that, over the past several years, we have spent more than we have produced—and we have spent too much because of the profligacy of the Federal Government. As the Congress reviews my proposed 1988 budget, it should remember that a vote for more government spending is a vote against correcting our trade deficit.

Strengthen Productivity and Competitiveness

We must work to improve our international competitiveness through greater productivity growth. The depreciation of the dollar since early 1985 has done much to restore our competitiveness. However, we do not want to rely on exchange-rate movements alone. Productivity growth provides the means by which we can strengthen our competitiveness while increasing income and opportunity. Since

1981, U.S. manufacturing productivity has grown at a rate 46 percent faster than the postwar average. This is a solid accomplishment, but still more remains to be done. We must encourage continued productivity growth in manufacturing and in other sectors of our economy.

One way to strengthen our global competitiveness is to free American producers from unnecessary regulation. My Administration has sought to deregulate industries in which increased competition will provide greater benefits to consumers and producers. It has also streamlined the Federal Government's regulatory structure. Americans have benefited significantly from the deregulation of airlines, financial services, railroads, and trucking. I will resist any attempt to reregulate these industries. Our economy will benefit further if we eliminate natural gas price controls, remaining trucking regulations, and unnecessary labor market restrictions. Also, without compromising the Nation's air quality, we should eliminate the bias that exists in current air pollution regulations against cleaner and more efficient new factories and power facilities. Where regulation is necessary, its costs should be balanced against its benefits to ensure that regulatory efforts are applied where they do the most good and to avoid placing American firms at a competitive disadvantage in the world marketplace.

Privatization shifts the production of goods and services from government ownership to the private sector. Privatization can also improve American competitiveness because private firms can produce better quality goods and services, and deliver them to consumers at lower cost, than can government. For these reasons, Americans benefit when government steps aside. Like deregulation and federalism, privatization embodies my Administration's belief that the Federal Government should minimize its interference in the marketplace and in local governance. We must return more government activities to the competitive marketplace by selling or transferring government-owned businesses. In 1986, the Congress authorized the Department of Transportation to sell Conrail in a public offering, which we hope will take place this year. Other businesses suitable for privatization include the Naval Petroleum Reserves, the Alaska Power Administration, and Amtrak.

Reform Agricultural Policies

Another high priority in 1987 must be to reform our agricultural programs. Besides costing taxpayers $34 billion this year alone, these programs divert land, labor, and other resources from their most productive uses. Most farm programs are costly and unfair because they give literally millions of dollars to relatively few individuals and corporations while many family farmers—who are those most often in need—receive little. In the process, farm programs raise the prices of many food items for all Americans, rich and poor.

Farm income support should not be linked to production through direct subsidies or propped-up prices for agricultural products. My Administration will seek a market-oriented reform package with two goals: gradually separating farm income support from farm production, and focusing that income support on those family farmers who need it most.

CONCLUSION

The economic policies of my Administration have created greater economic freedom and opportunity for men and women, private firms, and State and local governments to pursue their own interests and make their own decisions. These policies have produced a sustained economic expansion with low inflation, lower tax rates and a simpler tax code, the unshackling of industries from regulation, a surge in investment spending, and more than 12 million new jobs.

The American people demand a sound, productive, growing economy. Therefore, I shall continue to pursue policies to encourage growth, reduce the Federal budget deficit, correct the trade deficit, and strengthen the competitiveness of American producers. The American people will not tolerate a replay of the failed economic policies of the past. Therefore, I shall resist proposals to adopt any economic policy that abandons the accomplishments of tax reform, stymies growth, fuels inflation, perpetuates needless government interference in the marketplace, or fosters protectionism. With the help and cooperation of the Congress, we can sustain and strengthen the current economic expansion, and preserve and extend the economic achievements of the past 6 years.

Ronald Reagan

January 29, 1987

THE ANNUAL REPORT
OF THE
COUNCIL OF ECONOMIC ADVISERS

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LETTER OF TRANSMITTAL

Council of Economic Advisers,
Washington, D.C., January 23, 1987.

Mr. President:

The Council of Economic Advisers herewith submits its 1987 Annual Report in accordance with the provisions of the Employment Act of 1946 as amended by the Full Employment and Balanced Growth Act of 1978.

Sincerely,

Beryl W. Sprinkel

Beryl W. Sprinkel
Chairman

Thom Gale Moore

Thomas Gale Moore
Member

Michael L. Mussa

Michael L. Mussa
Member

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CHAPTER 1

Growth and Adjustment in the United States Economy

THE UNITED STATES ECONOMY is in the fifth year of the current expansion, and an acceleration of real growth with continued moderate inflation is projected for 1987 and beyond. While the pace of economic growth remained moderate in 1986, expansion proceeded on a broad front. Real gross national product (GNP) rose by 2.2 percent during the year, with output expanding in most sectors. Due in large part to a sharp decline in energy prices, inflation fell to the lowest rate in more than two decades. Rising real personal income and significantly lower interest rates contributed to strong growth of consumption and of residential investment. Despite a decline in business fixed investment and further deterioration of the trade balance, the unemployment rate fell to 6.6 percent and total employment grew by more than 2½ million persons. In each year of this expansion, more jobs were created in the United States than in the combined economies of the next six largest industrial democracies.

More than 4 years of economic expansion, with the inflation rate remaining near or below 4 percent and interest rates declining to their lowest levels in 9 years, have laid the foundation for sustainable real growth with moderate inflation. The problems that remain in the U.S. economy are primarily sectoral and structural: the Federal Government controls too much of the Nation's resources; a large trade deficit adversely affects many trade-sensitive industries and encourages protectionist sentiment; the domestic oil and gas industry and local areas heavily dependent on it are suffering the consequences of the decline in world oil prices; conditions remain depressed in much of American agriculture; and excessive and inappropriate regulation continues to burden business and consumers.

OVERVIEW OF THE REPORT

This *Report* analyzes the structural and sectoral problems that remain in the U.S. economy. It assesses policies to deal with these problems, while maintaining a sustainable rate of overall growth and making continued progress in moderating inflation. This chapter begins with a summary of the *Report*.

THE MACROECONOMIC SETTING

The broad economic forces that shape the overall performance of the U.S. economy and of its major sectors are the focus of Chapter 1. This chapter first reviews the main economic developments of 1986 in the context of the current expansion and in comparison with past expansions and with economic performance in other countries. This leads to an examination of the main forces that have influenced the performance and current problems of important sectors of the U.S. economy.

Wide swings in relative product prices are among these forces. The oil and gas industry and agriculture benefited from increases in the relative prices of their products in the 1970s, and have suffered as these relative prices declined in the 1980s. The problems of many trade-sensitive industries are directly related to the 28 percent decline in the relative price of imports between 1980 and 1986 and to the downward pressure of a strong dollar on the relative price of U.S. exports. On the positive side, lower relative prices of oil, agricultural products, and imports have benefited consumers. Also, a declining relative price of capital goods during this expansion has permitted strong growth of real investment without a corresponding drain on national saving.

Another critical factor influencing sectoral problems and structural change is the wide swing in real interest rates and real asset values that occurred in the 1970s and 1980s. During the period of rising inflation in the 1970s, real interest rates—the difference between nominal interest rates and anticipated inflation rates—were low and sometimes even negative. Borrowers benefited from low real borrowing costs and real values of tangible assets rose, while holders of fixed-interest rate instruments and equities experienced real capital losses. As often happens during periods of disinflation, during the 1980s real interest rates have been high by postwar standards. Borrowers have often suffered, while holders of financial assets including equities have enjoyed large gains that have contributed to substantial increases in real household net worth.

Differential productivity growth also drives important structural changes. Since 1981, productivity growth in manufacturing has accelerated above the postwar trend, while productivity growth in the service sector has remained sluggish. These differential rates of productivity growth, together with the relative constancy of the share of manufacturing output in real GNP, have induced a decline in the share of manufacturing in total employment—a development that might be less decried if its underlying causes were better understood.

Advancing technology and wide swings in interest rates and inflation rates, together with financial deregulation, have contributed to structural change in the banking and financial services industry and to instability in the relationship between money growth and nominal income growth. This instability has complicated the conduct of monetary policy in its dual tasks of restraining inflation and avoiding disruption of real economic growth.

The prospect of gradual resolution of the economy's structural and sectoral problems contributes to the forecast of stronger economic growth discussed at the end of this chapter. The growth rate of real GNP is projected to increase to 3.2 percent in 1987 and somewhat higher in 1988–89. Because of the wearing off of the temporary, inflation-reducing effects of the decline in oil prices and the delayed effects of dollar depreciation on import prices, the inflation rate is projected to rise moderately in 1987. Subsequently, the inflation rate should resume its decline, provided that the Federal Reserve continues to manage monetary policy in a manner consistent with sustainable real economic growth and with gradual reduction of the inflation rate toward the long-run goal of price stability.

FISCAL POLICY

Chapter 2 examines two elements of fiscal policy, budget control and tax reform, that influence both the sectoral and overall performance of the U.S. economy. Better control of the Federal budget is required to reduce the Federal deficit, primarily by reducing the share of Federal spending in GNP. Realization of the long-run benefits of the Tax Reform Act of 1986 is one of the many important reasons for pursuing this approach to deficit reduction. This Act improves overall incentives for economic activity and reduces disparities in rates of taxation on different forms of economic activity. In the long run, after the transition problems of some sectors are resolved, this Act is estimated to increase net national product by approximately 2 percent. Evaluated at current levels of national income and product, this implies approximately a $600 gain in the annual income of the average American family, without any loss of Federal revenue.

INTERNATIONAL IMBALANCES

Chapter 3 demonstrates that the large U.S. trade deficit is primarily a macroeconomic phenomenon. This phenomenon is fundamentally related to the rapid growth of domestic demand in the United States relative to the growth of U.S. output and relative to demand and output growth in the rest of the world. It is also related to the appreciation of the U.S. dollar between 1980 and 1985, which reduced the international competitiveness of U.S.-produced goods and services. And it is related to the deterioration of the U.S. national saving-investment balance, which reflects not abnormal behavior of the private saving-investment balance, but rather the persistence of a large Federal deficit late into the current expansion.

Stronger internally generated growth in other industrial countries, reduction of the Federal deficit through spending restraint, and policy reforms that encourage growth and restore credit worthiness in developing countries are critical elements in the global strategy to reduce international trade imbalances. Stronger internally generated growth in foreign countries is essential to maintain satisfactory rates of real growth in the world economy. This is especially important during a period when the growth of domestic demand is slowing in the United States and when improvements in the relative competitive position of U.S. tradable goods industries are shifting world demand toward U.S. products. International coordination of economic policies, especially among the leading industrial countries, can help to ensure that payments imbalances decline in an environment of greater exchange-rate stability and sustainable, noninflationary growth in the world economy.

FREE AND FAIR TRADE

Protectionism is a false solution to the U.S. trade imbalance. However justified are the claims of unfair trade practices by other countries, the massive deterioration of the U.S. trade balance clearly has not occurred primarily because foreign trade practices have become vastly more unfair. Moreover, starting a world trade war by resorting to protectionism would be especially imprudent at a time when the improving competitiveness of U.S. industries appears likely to bring significant expansion of U.S. exports.

As is discussed in Chapter 4, the Administration's policy of free and fair trade is to avoid protectionism at home while opening markets to U.S. products abroad. This policy fits well with the broader strategy of reversing the tide of macroeconomic forces principally responsible for the deterioration of the U.S. trade balance. Administration efforts to improve market access have brought significant results in bilateral negotiations with Japan on sector-specific trade problems and in cases initiated by the Administration against unfair foreign trade practices under Section 301 of the Trade Act of 1974.

Major initiatives to extend the Administration's trade policy include bilateral discussions with Canada to move toward a free-trade area and the new round of multilateral trade negotiations under the General Agreement on Tariffs and Trade (GATT). The agreed purpose of the new GATT round is to secure a standstill or rollback of existing protectionist policies, to improve GATT procedures for enforcing fair rules of international trade, and, most importantly, to enhance or extend GATT rules in areas of critical interest to the United States: trade in services, protection of intellectual property rights, rules governing international investment, and trade in agricultural products.

REFORM OF AGRICULTURAL POLICIES

The problems of U.S. agriculture are the focus of Chapter 5. Government policies have directly or indirectly subsidized agricultural production in the United States and in many other industrial countries. These policies have stimulated excess production that has depressed agricultural product prices in world markets. Government intervention has wasted resources by encouraging farmers to incur costs in order to produce commodities for which only the government provides a market. Much of the money spent on agricultural support programs has been dissipated in outright waste or delivered to owners of large farms that invariably receive the largest subsidy payments.

The solution is to reform agricultural programs by gradually decoupling farm income support from farm production and linking it to financial need. Simultaneous reform of agricultural policies in the United States, the European Community, and Japan would reduce the economic waste and budgetary cost of agricultural support programs for all countries.

RISK, REGULATION, AND SAFETY

Regulation is another mechanism through which the government influences the performance of different sectors of the economy and broader aspects of individual behavior. Chapter 6 discusses examples of excessive and inappropriate regulations that unduly limit individual choice, raise costs, and discourage economic activity. In some cases, regulations even work against their intended purposes. Rigid rules, such as some designed to reduce workplace hazards, can reduce production and employment opportunities without a corresponding gain in occupational safety. In this and other areas where government intervention may be indicated, the costs of regulations should be weighed against their likely benefits. Reliance on personal responsibility and market incentives often provides the best methods for reducing risk.

WOMEN IN THE LABOR FORCE

The final chapter of this *Report* examines one of the most important structural changes in the U.S. economy—increasing participation of women in the labor force. Over the past decade, women have accounted for 62 percent of total labor force growth. Increasing labor force participation of women has not led to large increases in unemployment rates for either men or women, and has made an important contribution to growth of real per capita income. Because many women now plan longer careers and acquire the requisite education, experience and skills, wages of women relative to those of men have been rising in the 1980s. These developments testify to the flexibility of U.S. labor markets and to the capacity of the market-oriented U.S. economy to generate productive and rewarding jobs for an expanding labor force.

THE U.S. ECONOMY IN 1986

Economic growth proceeded at a moderate pace in 1986, while significant declines were recorded in both the inflation rate and interest rates. Between the fourth quarter of 1985 and the fourth quarter of 1986 (preliminary estimate), real GNP rose by 2.2 percent. While the unemployment rate declined by only 0.3 of a percentage point during the year and remained relatively high by postwar standards, the employment-population ratio for persons over 16 years of age reached a new postwar peak of 61.3 percent at the end of 1986. Given the impact of declining oil prices, the inflation rate, measured by the consumer price index (CPI), turned negative in the first quarter. Over the entire year, the CPI rose by only 1.1 percent, the lowest inflation rate in more than 20 years. Nominal interest rates fell sharply early in the year and by yearend were near their lowest levels for the year and since 1977.

COMPONENTS OF DEMAND

On the demand side, real GNP may be decomposed into real consumption spending, real investment spending, real government spending, and real net exports. Strong growth of real consumption spending was the driving force behind demand growth for most of 1986. Real consumption spending rose at a 4.0 percent annual rate in 1986, fourth quarter to fourth quarter.

After rising nearly $14 billion in the fourth quarter of 1985, real nonresidential fixed investment declined by $19 billion in the first quarter of 1986 and then fell an additional $6.8 billion in the next three quarters. Real residential investment grew strongly, recording a 9.8 percent increase during the year. The continuing congressional debate over tax reform and final passage of the Tax Reform Act of 1986, together with the effect of lower oil prices on the domestic energy industry, apparently affected the pace and pattern of investment spending in 1986. Anticipated repeal of the investment tax credit, with an effective date of January 1, 1986, may have contributed to the sharp rise in real nonresidential fixed investment in the fourth quarter of 1985 and to its decline in the first quarter of 1986. The likelihood of an increase in business taxes and uncertainty about the final shape of tax reform may have helped to depress this category of real investment spending for the remainder of 1986. Lower mortgage interest rates contributed to strong growth of residential investment during 1986.

Real purchases by State and local governments grew 4.6 percent during 1986. Real Federal purchases followed a somewhat erratic path primarily because of fluctuations in defense purchases and purchases by the Commodity Credit Corporation, and ended the year 1.8 percent above their level in the fourth quarter of 1985. Overall, growth of real government purchases contributed 0.7 percent to real GNP growth in 1986.

Real net exports of goods and services improved by $6.1 billion in the first quarter of 1986, and then declined by $28 billion in the second quarter and by a further $9.4 billion in the third quarter, before recovering by $7.7 billion in the fourth quarter. Net exports in nominal terms showed much less deterioration during 1986 than real net exports. Specifically, between the fourth quarter of 1985 and the third quarter of 1986, real net exports declined by $31.3 billion of 1982 dollars, while nominal net exports declined by only $3.6 billion of current dollars. The reason for this difference is the low relative price of imports and the further decline in this relative price during 1986, attributable primarily to the decline in the price of imported oil.

THE OIL PRICE DECLINE

Probably the most important special factor affecting the U.S. economy in 1986 was the sharp drop in world oil prices, which was promptly reflected in domestic oil prices. Between November 1985 and April 1986, the spot price of West Texas Crude fell from $30.90 to $13.75 per barrel. A further $2.45 per barrel decline in domestic oil prices occurred between April and July, before prices recovered to $17.60 per barrel in December. The sharp decline in oil prices had pronounced adverse effects on the domestic oil and gas industry. Real investment in this industry declined by more than $10 billion in the first half of 1986, accounting for more than half of the decline in real business fixed investment. Employment in the domestic oil and gas industry fell by nearly 150,000, mainly in the first half. Further employment losses occurred in regions heavily dependent on the oil and gas industry.

For the rest of the economy, the decline in oil and gas prices had important beneficial effects. The CPI fell at an annual rate of 4.3 percent between January and April, the first significant decline in this index since 1954. The decline in consumer prices was clearly attributable to lower oil and gas prices, because the CPI excluding energy rose at an annual rate of 2.9 percent between January and April. The decline in consumer prices contributed to strong gains in real disposable personal income that, in turn, fueled the strong growth of consumer spending, which was the mainstay of overall economic growth.

The fall in oil prices, inflation, and inflationary expectations also played a critical role in the sharp decline in nominal interest rates. Interest rates on 10-year Treasury securities fell from 9.26 percent in December 1985 to 7.30 percent in April 1986, and declined a further 19 basis points by yearend. Interest rates on 91-day Treasury bills fell somewhat less, moving down from 7.10 percent in December 1985 to 6.06 percent by April 1986 and to 5.53 percent by yearend. The sharp decline of interest rates spread rapidly to mortgage interest rates.

Assuming no further substantial change in domestic oil prices, most of the negative effects of lower oil prices have probably been absorbed, while the beneficial effects are yet to be fully realized. Lower energy costs will contribute to lower production costs in many important domestic industries. Productivity growth may be enhanced in the long run as firms adopt more efficient energy-using technologies, partially reversing the adverse productivity effects of higher energy prices in the 1970s.

SECTORAL PERFORMANCE

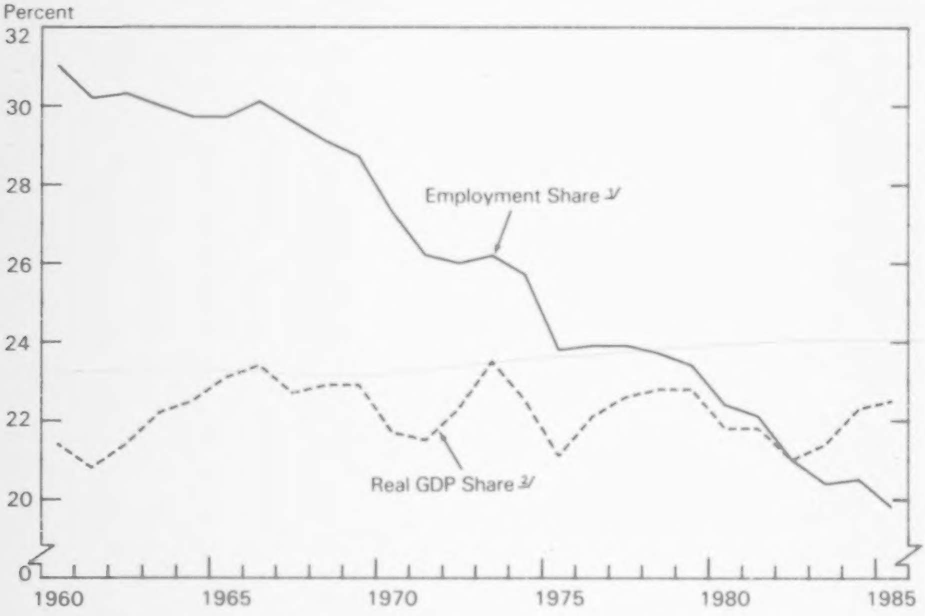
The effects of economic advance were widespread across industries and regions. Output expanded at about the same rate in goods-producing and service-producing industries. Industrial production data show increases in output in 18 of the 28 major industries for which results are reported. Because of strong productivity gains in manufacturing industries, however, employment increases were concentrated primarily in service-producing industries.

The relative constancy of the share of manufacturing in total output, combined with a declining share of manufacturing in total employment, is a longstanding phenomenon. It does not reflect a long-term weakness in the growth of output of manufacturing industries relative to the total economy. Rather, it reflects the general tendency (discussed later in this chapter) for labor productivity growth in manufacturing to exceed labor productivity growth for the rest of nonfarm business.

For analytical purposes, this phenomenon is most appropriately assessed by comparing the behavior of the ratio of value added in manufacturing to real nonagricultural gross domestic product (GDP) with the ratio of manufacturing employment to nonfarm employment, as illustrated in Chart 1–1. Data for value added by industry, which are available annually through 1985, were used to construct the chart. Data on final expenditure by sector, which are available quarterly through 1986, confirm the general relationship illustrated in Chart 1–1. Specifically, in 1986, when labor productivity growth in manufacturing remained substantially above that in total nonfarm business, the share of final expenditures on goods output (which are dominated by manufacturing) remained essentially constant, while the share of manufacturing in nonfarm employment continued to decline.

Chart 1-1

Manufacturing Shares in Real GDP and Employment



1/ Manufacturing as percent of nonfarm payroll employment.

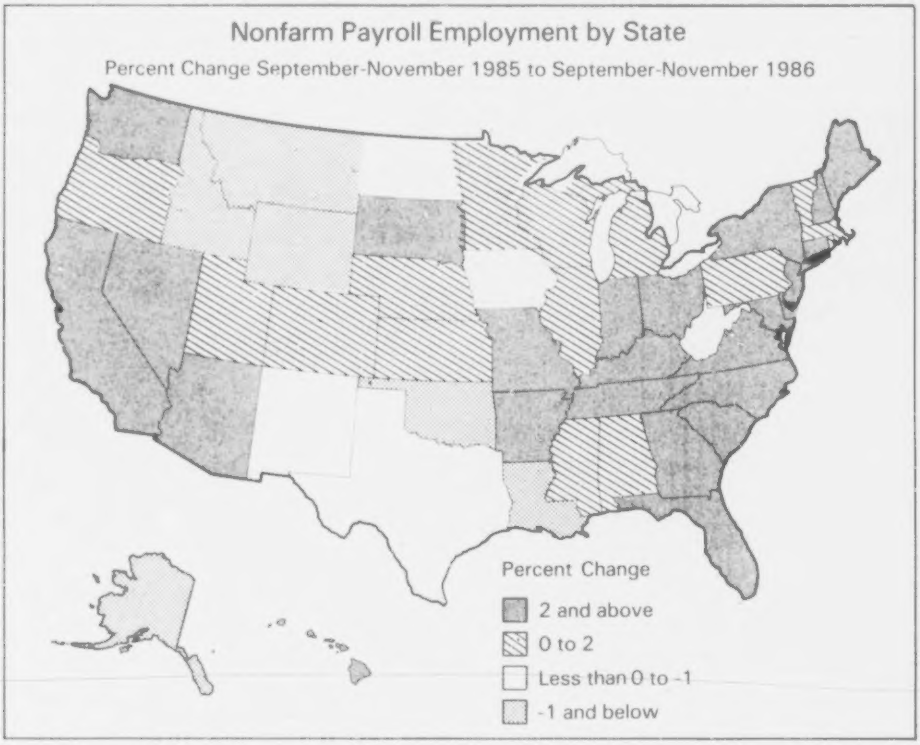
2/ Manufacturing as percent of real gross domestic product less agriculture, forestry, and fisheries.

Sources: Department of Commerce and Department of Labor.

REGIONAL DEVELOPMENTS

While GNP data are not available on a regional basis, data on employment by State provide a reasonably good impression of the regional economic performance of nonagricultural business. The regional pattern of employment gains for 1986 is illustrated in Chart 1-2. The chart is constructed using data from the establishment survey on employment in nonfarm business by State. The change in employment from the same month a year ago is used to control for seasonal factors, and the results for the 3 most recent months for which data are available (September, October, and November) are averaged in order to limit the effects of sampling error.

Chart 1-2


Nonfarm Payroll Employment by State
Percent Change September-November 1985 to September-November 1986
Percent Change
▨ 2 and above
▧ 0 to 2
☐ Less than 0 to -1
▩ -1 and below

Source: Department of Labor.

In 39 States and the District of Columbia, increases in employment were recorded for the period covered by Chart 1-2. In 36 States, employment increased by at least 1 percent, and in 24 States, employment increased by at least 2 percent. In 11 States, employment fell and in 6 States the decline in employment exceeded 1 percent. Not surprisingly, States where the oil and gas industry is important, Alaska, Louisiana, Oklahoma, Texas, and Wyoming, are among those that recorded significant employment losses. If Chart 1-2 were extended to cover the period since the last cyclical peak (July 1981 to November 1986), employment gains would be shown in all but 5 States. Employment gains of 10 percent or more would be shown in

24 States and gains exceeding 5 percent would be shown in 40 States.

Widespread employment gains across most of the country do not imply an absence of economic problems in some industries and regions. Agriculture, mining, the oil and gas industry, and other trade-sensitive industries have experienced problems for some time, and particularly for the oil and gas industry, these problems have recently deepened. In areas heavily dependent on declining firms and industries, economic problems have spread to the support and service industries. However, assertions that the United States is becoming a "bicoastal economy" with broad areas of economic depression across the Nation's midsection, are greatly exaggerated. Economic progress has been widespread. Remaining economic problems tend to be concentrated in particular industries and in specific areas of the country.

THIS EXPANSION IN THE POSTWAR CONTEXT

The performance of the U.S. economy in 1986 should be assessed in the broader context of the current expansion, in comparison with economic performance in other industrial countries, and with earlier postwar expansions in the United States. Viewed in this context, it is important to note that despite a moderate pace of overall growth since mid-1984 and continuing problems in some sectors, steady progress has been made in reducing inflation and interest rates. The foundation for sustainable real economic growth, with continued moderate inflation, has been strengthened.

In other leading industrial countries, substantial progress has also been made in reducing the rate of inflation during the 1980s. As is discussed in Chapter 3, however, other industrial countries have generally recovered less strongly from the worldwide recession of the early 1980s than has the United States. This is especially the case when recovery is calibrated in terms of growth of real domestic demand, which measures total real spending by the residents and government of a country. Moreover, the deterioration of U.S. real net exports during the current expansion contributed significantly to economic growth in other countries, while limiting real GNP growth in the United States. In contrast, during earlier postwar expansions, growth rates of real GNP in most other industrial and in many developing countries typically exceeded the U.S. growth rate.

Comparison of unemployment rates in the United States and Western Europe dramatically illustrates the relative strength of U.S. economic performance during the current expansion. At 6.6 percent, the total U.S. unemployment rate remains relatively high by postwar standards, but is well down from its cyclical peak of 10.7 percent in December 1982. In Western Europe, unemployment rates typically ran well below U.S. rates during the 1960s and 1970s. During the 1980s, despite recovery from the recession of 1980–82, the average unemployment rate in the major countries of the European Community has risen persistently, reaching 12 percent in early 1986.

The situation in the U.S. economy today should also be compared with that prevailing at similar stages of earlier postwar expansions. In the later stages of the long expansion of the 1960s, real growth remained strong. However, after the slowdown in 1967, the inflation rate and interest rates (although still low by recent standards) resumed their upward movement. Tightening of monetary and fiscal policy undertaken to curb rising inflation at the end of the expansion of the 1960s probably contributed to the recession of 1969–70. The expansion that began in 1970 was barely a year old when rising inflation and a deteriorating balance of payments led to the imposition of price and wage controls and to devaluation of the dollar. With the removal of controls, the inflation rate and interest rates rose in 1973, exacerbated at the end by the surge in world oil prices. Shortly thereafter, the economy collapsed into one of the deepest recessions of the postwar period.

In the recovery from the 1974-75 recession, the inflation rate and interest rates continued on a downward path for the first six quarters of the expansion, and short-term interest rates kept falling for an additional two quarters. However, by the fourth year of the expansion (comparable to 1986 during the current expansion), the inflation rate and short-term interest rates were more than 3 percentage points above their minimum levels for the expansion, and this was before the second oil price shock (in early 1979) contributed to a further upsurge of inflation and interest rates.

This expansion ended in a double crescendo of rising inflation and interest rates and falling economic activity. The tightening of monetary policy in late 1979 and early 1980 and the brief recession in 1980 brought only temporary respite from high inflation and interest rates at the cost of a sharp rise in unemployment. Following the reacceleration of monetary growth in mid-1980, the inflation rate and interest rates rose to new peaks in 1981, while economic activity collapsed into a deep recession.

Fortunately, the cure applied in 1981 proved more enduring, even if more painful, than that attempted and aborted in 1980. Average annual real GNP growth during the first 4 years of the current expansion has been 0.7 of a percentage point below that for the 4 years from 1975 to 1979 (4.0 versus 4.7 percent). However, the inflation rate and interest rates have continued to decline during the current expansion, in contrast with behavior in the late 1970s. Currently, there are no signs of the developments associated with the unfortunate conclusions of earlier expansions. The destructive sequence of business cycles with progressively rising inflation rates and interest rates, punctuated by severe recessions, has been broken. With appropriate macroeconomic policies, the U.S. economy need not suffer, once again, the painful process of wringing entrenched inflation out of the economic system.

RELATIVE PRICES AND STRUCTURAL CHANGE

The 1970s and 1980s saw not only wide swings in the overall rate of price inflation, but also dramatic movements in relative prices among important sectors of the economy. Such relative price movements are generally associated with important structural changes and with adjustment problems for particular sectors of the economy. Sectors experiencing relative price increases usually enjoy rapidly growing output and employment with rising incomes and asset values, while sectors facing relative price declines often suffer stagnating output and employment with falling incomes and asset values.

Movements in relative prices for several important sectors of the U.S. economy over the past 30 years are illustrated in Chart 1-3. For each sector, the relative price is the ratio of that sector's implicit price deflator to the implicit price deflator for total GNP. The important message conveyed by Chart 1-3 is that relative price movements have been much larger in the 1970s and 1980s than they typically were between 1955 and 1970.

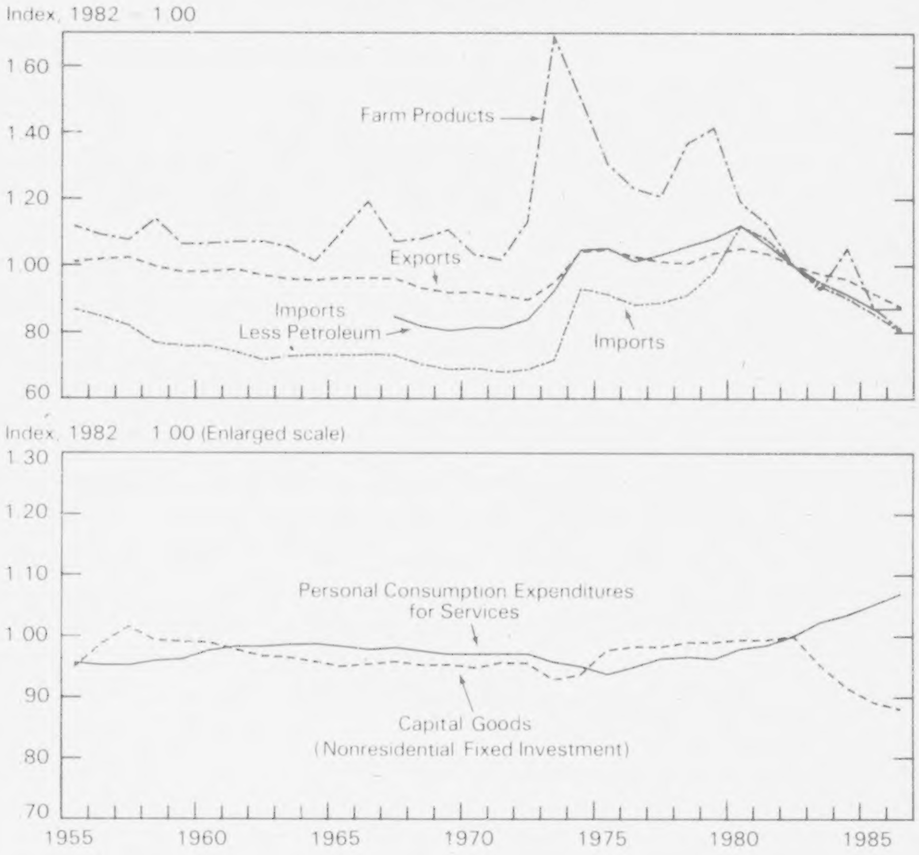
RELATIVE FARM PRODUCT PRICES

After 15 years of modest fluctuations, the relative price of farm products rose sharply in the early 1970s, declined substantially in the mid-1970s, and then rose again until 1979, as shown in Chart 1-3 (top panel). Since 1979, the relative price of farm products has been on a declining path, and in 1986 was below the 1955-70 average. These movements in the relative price of farm products in the United States were correlated with similar relative price movements in world markets.

The rise in the relative price of farm products in the 1970s was associated with substantial gains in real farm incomes and large increases in the real value of farmland. This development encouraged large-scale and sometimes excessive borrowing to finance purchases of farm equipment and farmland. With the decline of the relative price of farm products in the 1980s, however, farm incomes and land values fell. Many farmers who borrowed heavily in the late 1970s

Chart 1-3

Relative Price Movements



Note.—Ratio of component implicit price deflator to GNP implicit price deflator.

Sources: Department of Commerce and Council of Economic Advisers.

with the expectation of rising farm incomes and land values have experienced severe economic difficulties. The role of government policy in creating these problems, and in correcting them, is discussed in Chapter 5.

RELATIVE IMPORT AND EXPORT PRICES

Movements in the relative price of products imported into and exported from the United States followed a pattern broadly similar to that of farm products. The relative prices of imports and exports were quite stable during the late 1950s and the 1960s, before rising sharply in the early 1970s. After declining moderately between 1974 and 1976, the relative prices of imports and exports rose again in the late 1970s. Since 1980, the relative prices of imports and exports have been declining and relative export prices are now near levels typical of the period around 1960.

Increases in the relative price of imported oil contributed significantly to the sharp rise in the relative price of all imports in 1973–74 and again in 1979–80. However, movements in the relative price of imported oil do not account for all of the movement in relative import prices; the same general pattern is observed in the relative price of non-oil imports (also shown in the top panel of Chart 1–3). An important exception is that the relative price of non-oil imports started to rise modestly in 1986, but the sharp decline in the price of imported oil caused the relative price of total imports to continue to decline.

As is discussed further in Chapter 3, movements in the relative prices of both imports and exports have tended to mirror movements in the real foreign exchange value of the U.S. dollar. The depreciation of the dollar in 1971 and especially in 1973 contributed to increases in the relative price of imports and eased the competitive situation of U.S. exporters relative to their foreign rivals. The very weak dollar in the late 1970s and 1980 had similar effects. In contrast, the strong real appreciation of the dollar between 1980 and early 1985 was associated with a sharp decline in relative import prices and placed U.S. exporters under severe pressure vis-a-vis foreign competitors. The substantial decline in the real foreign exchange value of the dollar that started in early 1985 began to be reflected in a higher relative price of non-oil imports only in 1986, and is not yet clearly apparent in relative export prices. This may be partly because relative import and export prices never fully reflected the very high dollar, as well as because of longer than normal delays in the adjustment of relative goods prices to a lower dollar.

RELATIVE CAPITAL GOODS PRICES

After 25 years of only very modest movements (Chart 1–3, bottom panel), the relative price of capital goods (nonresidential fixed investment) fell by 12 percent between 1982 and 1986. This decline is probably related to the same forces that depressed the relative prices of many manufactured goods, especially those linked strongly to international trade. The decline in the relative price of capital goods made possible very strong growth of real business fixed investment during the current expansion without correspondingly strong growth of demand for investment financing. Specifically, between the fourth quarter of 1982 and the fourth quarter of 1985, the ratio of real business fixed investment to real GNP rose from 11.2 percent to a postwar peak of 13.2 percent. Over this period, the share of nominal spending on business fixed investment rose from 11.0 to only 11.6 percent. Thus, the decline in the relative price of capital goods allowed the share of real business fixed investment spending in real GNP to rise by 2 percentage points, while the share of such spending in nominal GNP rose by only 0.6 of a percentage point.

The lower relative prices of capital goods presumably made investment spending more attractive by reducing the cost of acquiring productive assets. This contributed to the strong growth of real investment during the current expansion. As is discussed in Chapter 3, the decline in the cost of capital goods allowed a given increase in real investment to be financed with a smaller drain on national saving and hence a smaller demand for foreign borrowing than would otherwise have been the case.

EFFECTS OF RELATIVE PRICE CHANGES

In assessing the effects of relative price changes, it is important to remember that the weighted average of the relative prices of all the components of GNP or of total domestic spending is always constant. If the relative prices of some components increase, this must be offset by declines in the relative prices of other components. In particular, as is shown in Chart 1-3, the relative price of services (which constitute about one-third of GNP and of total domestic spending), generally moves in the opposite direction from the other relative prices (which refer to components of smaller magnitude). This relationship is especially apparent in the 1980s, when all of the other relative prices in this chart are declining.

The economic fortunes of particular industries have been strongly influenced by movements in their own relative prices. Agriculture did very well when the relative price of farm products and farm exports rose in the 1970s, and has suffered with their decline in the 1980s. The domestic oil and gas industry boomed during the period of high relative oil prices, and has experienced severe difficulties since the recent sharp decline in oil prices. Consumers of food and energy have been on the other side, losing during the period of rising relative prices of these products in the 1970s, and gaining during the period of falling relative prices in the 1980s.

A similar story applies generally for many U.S. manufacturing industries that must compete with imports of foreign products at home or that seek to export their products to foreign markets. Under the shelter of the weak dollar and high relative import prices in the 1970s, many of these industries prospered. Despite sluggish productivity growth in many manufacturing industries, output, employment, and exports of many manufacturing industries expanded substantially in the 1970s. This situation reversed during the period of the strong dollar and declining relative import and export prices in the 1980s. Many U.S. manufacturing industries came under heavy pressure from foreign competitors in both domestic and foreign markets, despite an acceleration of productivity growth. Consumers of manufactured products, of course, suffered from higher prices of these products than probably would have prevailed if the dollar had remained stronger in the 1970s. Consumers have recently benefited from significantly lower relative prices of these products supplied by both foreign and domestic producers.

Although movements of relative prices are often associated with problems of particular industries, they play an essential role in the effective and efficient functioning of the economic system. When real economic conditions change because of changes in taste or technology or the availability of productive resources, relative price changes signal the need to alter patterns of consumption and production. However, wide swings in relative prices that are associated with the process of inflation and disinflation generate significant problems not only for individual industries, but also for the economy as a whole. To attempt to restrain relative price movements by any direct means is no solution. Such attempts often generate surpluses or shortages of products whose relative prices are controlled. They injure the economy by limiting its flexibility to respond to economic and technological change. In the end, they create worse problems than they resolve. The solution to the excessive and unnecessary volatility of relative prices generally associated with inflation and disinflation is to avoid the macroeconomic policies that contribute to inflation and to the subsequent need to disinflate.

REAL INTEREST RATES, NET WORTH, AND SAVING

In addition to wide swings in relative goods prices, the past 15 years have witnessed substantial movements in real asset values and rates of return. Anticipated real rates of return are important factors in decisions about borrowing and lending and about saving and investing. Wide swings in the real values of assets strongly influence real household net worth and therefore consumption and saving as well. The causes and effects of these movements in real interest rates and real asset values need to be understood within the context of the process of inflation and disinflation that has dominated economic events since the late 1960s.

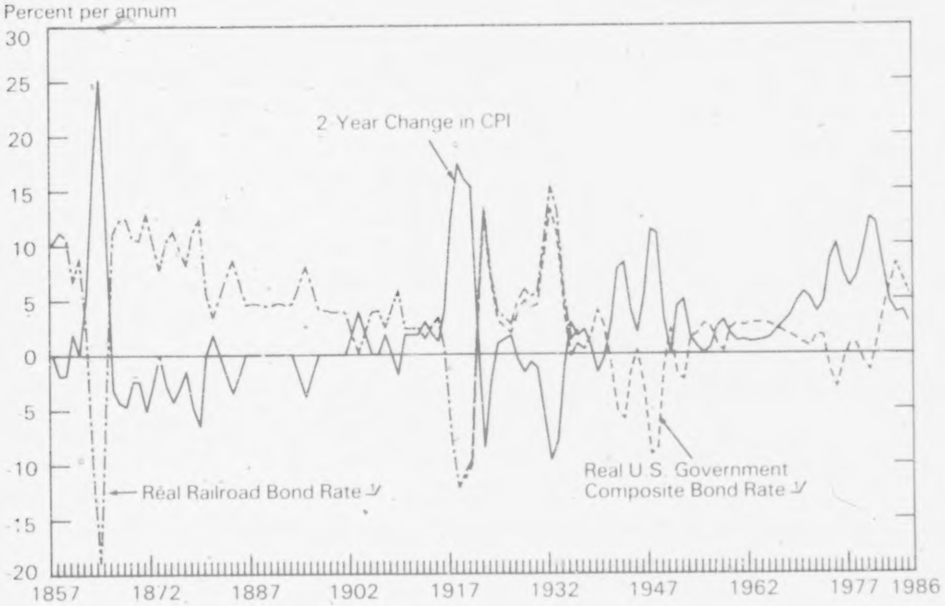
The real rate of interest on a loan or security is the nominal interest rate less the inflation rate realized over the life of the loan or security. Thus the real rate of interest is the return paid by borrowers to lenders, measured in real goods and services. The ex ante real interest rate is the nominal rate of interest on the loan or security minus the rate of inflation that is anticipated when the loan is made or the security is purchased. Ex ante real interest rates, however, are often difficult to measure because of the lack of reliable and consistent information about expected inflation. A useful proxy measure of ex ante real interest rates can be constructed by assuming that the anticipated rate of future inflation corresponds reasonably closely to recent past rates of inflation. This proxy measure of ex ante real interest rates is probably most reliable during periods when the actual inflation rate is stable, and anticipated rates of future inflation are likely to correspond reasonably closely to recent past inflation rates.

The long-run behavior of this proxy measure of ex ante real interest rates is illustrated in Chart 1-4. The yield on railroad bonds is used to measure nominal interest rates from 1857 to 1936, augmented by a composite of long-term government bond yields since 1919. The annualized rate of increase in the CPI over the preceding 2 years is subtracted from these nominal interest rates to construct the proxy measure of the real interest rate. The CPI for early years is not completely comparable with the index used today, but this is not likely to affect seriously the main results discussed below. For the past two decades, the behavior of the proxy measure of real interest rates depicted in Chart 1-4 is broadly consistent with that shown by other measures of real interest rates.

The real interest rate on long-term government bonds shown in Chart 1-4 was in the range of 2 percent during the 1960s before declining, sometimes to negative levels, in the middle and late 1970s. Starting in 1981, real interest rates rose substantially above the levels of the 1960s; the proxy measure shown in Chart 1-4 reached a peak of 8.25 percent in 1984. Although high by postwar standards, the level of real interest rates in the 1980s is not unprecedented over a longer historical period. Over the period since 1857, the proxy real long-term rate shown in Chart 1-4 averaged 3.11 percent; in the 1982-86 period, it averaged 6.13 percent. However, during a prolonged period in the late 1800s, real long-term rates were higher than in the 1980s; during the 15-year period ending in 1880, the real rate on railroad bonds shown in the chart averaged 10.44 percent. Since 1900, there have been two periods (in the early 1920s and again in the early 1930s) when real rates rose to levels as high as in the early 1980s. There have also been several periods when the

Chart 1-4

Proxy Measure of Real Long-Term Interest Rates



[1] Nominal yield minus the average annual percent change in the consumer price index over the preceding 2 years.

Sources: Department of Commerce, Department of Labor, and Department of the Treasury.

proxy measure of real interest rates was significantly negative, as occurred in the 1970s.

High real interest rates in the second half of the 19th century are sometimes attributed to the rapid growth in the U.S. economy and high prospective rates of return on investment that attracted capital from overseas to finance the industrial boom. Similarly, the rise in real interest rates in the early 1980s has been attributed to an improved climate for capital investment in the United States, resulting from the business tax cuts enacted in 1981, the decline in the inflation rate, and strong real economic growth early in the expansion.

Other explanations relate high real rates in the early 1980s to the emergence of large actual and prospective budget deficits and to a shift to disinflationary monetary policy. Although most analysts agree on the direction of the influence of budget deficits on interest rates, the evidence of the strength of that influence is by no means unambiguous. The budget deficit increased in 1980 and 1981, but very large budget deficits did not emerge until 1982, after much of the apparent rise in real interest rates had taken place. The increase in real interest rates before 1982, therefore, would need to be related to expectations of large future budget deficits.

It is plausible that restrictive monetary policy contributed to higher real interest rates in 1980–82 and perhaps again in the second half of 1984. However, given rapid monetary growth over most of the expansion, it is difficult to see restrictive monetary policy as the persistent and predominant cause of high real interest rates (except insofar as monetary policy has continued to contribute to the moderation of inflation). Moreover, the rising stock market and the boom in investment spending since 1982 are somewhat difficult to reconcile with large budget deficits or disinflationary monetary policy as the exclusive explanations of high real interest rates.

One apparent regularity in the behavior of the proxy measure of real interest rates illustrated in Chart 1–4 is the strong inverse relationship between movements in the real interest rate and movements in the inflation rate. During periods of rapidly changing inflation rates, expectations of future inflation may differ substantially from recent past inflation. Hence, caution is called for in interpreting measures of the ex ante real rate such as those shown in Chart 1–4. Recognizing this limitation, it is nevertheless the case that since 1857, all periods of high or rising inflation, including the middle and late 1970s, were associated with sharp declines in the proxy measure of the real interest rate. During all periods of sharply declining inflation or deflation, including the early 1920s, the early 1930s, and the early 1980s, the real interest rate turns strongly positive. When placed in a longer historical context, neither the negative real interest rates in the 1970s nor the rise of real interest rates in the 1980s is particularly unusual, given the sharp movements in the inflation rate that were also occurring. Although many factors have probably contributed to movements of real interest rates in the past decade, the evidence suggests that these movements are consistent with past experience and should be viewed as normal concomitants of the process of inflation and disinflation.

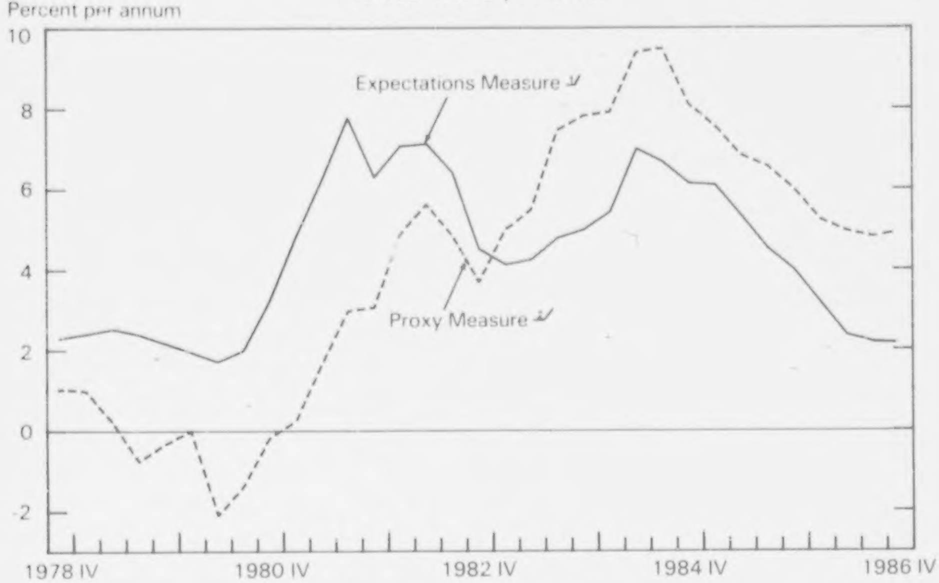
Adjustment of Inflation Expectations

The relationship between changes in the inflation rate and the proxy measure of the real interest rate is consistent with a lag in the adjustment of inflation expectations behind the actual inflation rate. The potential effect of this adjustment lag is illustrated in Chart 1–5, which compares two measures of the ex ante real long-term interest rate during the past 8 years. The "proxy measure" is constructed by subtracting the annual rate of change in the CPI over the preceding 2 years from the nominal yield on 10-year Treasury securities. The "expectations measure" is calculated by subtracting from the same nominal yield a measure of 10-year inflationary expectations taken from a survey of financial experts. Both measures of the ex ante real interest rate in Chart 1–5 indicate that long-term real interest rates rose sharply in the early 1980s and that real long-term interest rates have been declining since 1984.

Chart 1-5

Ex Ante Real Long-Term Interest Rates

10-Year Treasury Securities



1/ The expectations measure is the yield on 10-year Treasury securities (constant maturity) minus 10-year inflation expectations from the Decision-Makers Poll by Richard B. Hoey, Drexel Burnham Lambert, Inc.

2/ The proxy measure is the yield on 10-year Treasury securities (constant maturity) minus the average annual percent change in the consumer price index over the preceding 8 quarters.

Sources: Department of the Treasury and Department of Labor, except as noted.

The relative movement in the two measures of the ex ante interest rate indicates a lag in the adjustment of long-term inflation expectations to actual inflation rates. During the period of high inflation and even 2 years after the inflation rate began to fall, the long-term expected inflation rate remained below the 2-year moving average of the CPI. Accordingly, through 1982 the expectations measure of the real interest rate remained above the measure based on actual inflation. Long-term inflationary expectations began declining in 1981; but because of the lag in the adjustment of such expectations, they fell less rapidly than the 2-year moving average of the CPI. Since 1982, the expected inflation rate has been consistently above the 2-year average actual inflation rate. Accordingly, after 1982, the proxy measure of the real interest rate is above the expectations measure.

Thus, the divergence of the two measures of ex ante real interest rates depicted in Chart 1-5 reflects the failure of inflation expectations to adjust quickly, both to the rise in actual inflation in the 1970s and to its subsequent decline in the 1980s.

The lag in the adjustment of inflationary expectations helps to explain why nominal interest rates remain relatively high in comparison with actual inflation rates during periods of disinflation, and why nominal interest rates tend to decline only gradually with the persistence of lower actual inflation rates. Borrowers and lenders who continue to anticipate relatively high future inflation rates agree to loans with nominal interest rates that reflect these expectations, rather than lower actual rates of current inflation. As evidence of lower inflation accumulates, inflation expectations are revised downward, and this translates into lower nominal interest rates.

The steady and substantial decline since mid-1984 in the real interest rates shown in Chart 1-5 reflects this process of the decline in nominal interest rates in the context of a gradual, albeit uneven, downward adjustment of inflation expectations. The expectations rate in Chart 1-5 remains considerably below the real interest rate measured with current inflation, reflecting the persistence of inflation expectations that exceed recent actual inflation. To a large extent, the difference between current and anticipated inflation in 1986 can be attributed to the effects of the oil price declines on current inflation, which are largely temporary. During the last 6 months of 1986, 10-year inflation expectations of 5 to 5¼ percent are apparently incorporated into nominal rates, which implies a 10-year anticipated real interest rate of just over 2 percent. This is generally consistent with the level of the proxy measure of the real long-term interest rate recorded in the 1960s.

Consequences of Real Interest Rate Changes

The wide swings in real interest rates associated with the inflation and disinflation of the past 15 years have had important, often adverse, effects on the economy and on the financial system. In the 1970s, when actual inflation accelerated ahead of what had been anticipated, lenders earned lower real rates of return than they had expected and suffered large capital losses as increases in nominal interest rates depressed the market value of existing fixed-rate securities. Borrowers generally benefited from paying lower (even negative) real interest rates than they had anticipated, and enjoyed capital gains from the reduced real value of their debts.

These wealth transfers between borrowers and lenders did not directly affect total wealth, but such arbitrary and unexpected redistributions may have interfered significantly with the efficient functioning of national and international credit markets. Lenders, having experienced losses, likely became less willing to extend credit unless compensated for the uncertainty about future inflation. The borrowers most willing to continue to borrow at higher nominal rates implicitly assumed continued high future inflation.

With disinflation in the 1980s, the situation of the 1970s was reversed. Borrowers experienced capital losses and lenders realized gains as the real cost of credit rose above what had been anticipated. When borrowers could not fulfill their obligations, lenders also faced losses. In many cases (including loans to energy producers, agriculture, and developing countries) debt problems were exacerbated by declining relative commodity prices associated with disinflation.

The general association of wide swings in real interest rates with the process of inflation and disinflation suggests that the high real interest rates and associated difficulties of the 1980s are intimately related to the inflation of the 1970s. In an environment of variable inflation, it is more difficult for the public to foresee accurately changes in the inflation rate. Hence, the public is likely to base lending, borrowing, saving, and investment decisions on information about future real rates of interest that turns out to be incorrect. The result is unanticipated capital gains and losses that can distort incentives to borrow and lend or save and invest. The prescription to diminish the likelihood of a recurrence of these problems is to avoid policies that contribute to a return of high inflation and therefore to the painful consequences of subsequent disinflation.

REAL ASSET VALUES AND NET WORTH

Wide swings in real asset values have been another important counterpart of the process of inflation and disinflation. Generally, tangible assets such as farmland and owner-occupied housing that provide reasonably good hedges against inflation rose substantially in real value during the 1970s. During the 1980s, real farmland values have declined, and the real value of owner-occupied housing has leveled off. In contrast, the real value of financial claims against the productive assets used by nonfarm businesses (the real value of bonds and equities) declined during the period of rising inflation, and recovered strongly during the period of disinflation.

These swings in real asset values are reflected in the composition of household net worth, as reported in Table 1–1. Between the third quarter of 1965 (when the inflation rate was still under 2 percent) and the third quarter of 1978 (just before the second oil price shock and second surge of double-digit inflation), the ratio of household net worth to GNP declined from 321 percent to 290 percent. Among the components of net worth, the value of owner-occupied housing grew more rapidly than GNP, while the values of consumer durables, noncorporate businesses (farm and nonfarm), pension fund and life insurance reserves, other financial assets, and total household liabilities maintained essentially constant ratios to GNP. Thus, the decline in the ratio of the value of household holdings of corporate equities to GNP more than accounted for the decline in the ratio of household net worth to GNP. Indeed, the real value of such holdings fell absolutely by $755 billion of 1982 dollars between the third quarters of 1965 and 1978.

TABLE 1-1.—*Real household assets and liabilities, 1965–86*

[Outstanding, end of period]

Item	Level[1] (billions of 1982 dollars)			Percent of real GNP		
	1965 III	1978 III	1986 II	1965 III	1978 III	1986 II
Total assets	7,763	10,675	14,273	370	340	390
Owner-occupied housing	1,102	2,017	2,175	53	64	59
Consumer durables	685	1,091	1,261	33	35	34
Other tangible assets	436	955	1,197	21	30	33
Total financial assets	5,540	6,611	9,640	264	211	263
Equity in noncorporate businesses:						
Farm	527	838	491	25	27	13
Nonfarm	805	1,169	1,625	38	37	44
Corporate equities	1,809	1,054	2,074	86	34	57
Pensions and life insurance	753	1,122	1,901	36	36	52
Other financial assets	1,647	2,428	3,550	79	77	97
Total liabilities	1,028	1,577	2,253	49	50	62
Home mortgages	618	954	1,335	29	30	36
Installment and other consumer credit	294	432	608	14	14	17
Other liabilities	116	191	310	6	6	8
Household net worth	6,735	9,098	12,021	321	290	328
ADDENDUM:						
Net Federal Government debt[2]	627	670	1,317	30	21	36

[1] Deflated by GNP implicit price deflator.

[2] Debt of Federal Government held by the public less Federal debt held by the Federal Reserve System.

Note.—Data include households, personal trusts, and nonprofit institutions.

Sources: Department of Commerce (Bureau of Economic Analysis) and Board of Governors of the Federal Reserve System.

Next, consider the changes in net worth and its components between the third quarter of 1978 and the second quarter of 1986 (each the 14th quarter of its respective expansion). Real household net worth rose by $2.9 trillion of 1982 dollars in just under 8 years, exceeding its real gain during the 13 years between 1965 and 1978. The ratio of household net worth to GNP rose to 328 percent, more than recovering the ground lost between 1965 and 1978. Among the components, consumer durables maintained a constant ratio to GNP. The ratio of owner-occupied housing to GNP declined modestly, but remained above that recorded in 1965. The real value of equity in noncorporate farm business fell absolutely and as a share of GNP. Liabilities grew more rapidly than GNP, but so did total assets. The value of financial assets primarily representing claims on nonfarm business (equity in nonfarm noncorporate business, corporate equities, pension and life insurance reserves, and other financial assets) all grew significantly more rapidly than GNP. The combined increase in the real value of these financial assets exceeded the gain in real household net worth.

To some extent, gains in the real value of holdings of these financial assets reflected household saving and business retained earnings. However, a substantial part of these gains was due to increases in the real market value of existing financial claims against nonfarm business. These capital gains reflect substantial increases in the real value of the existing stock of productive capital employed by nonfarm business. Thus, the reversal of the earlier downward movement in the real value of claims on business enterprises played the key role in the recent growth of real household net worth and in the recovery of the ratio of net worth to GNP. As will be discussed below, this gain in real household net worth has implications for the recent behavior of household consumption and saving.

The nature and source of this gain also has potentially important implications for business investment. One prominent theory of business investment holds that when the market value of claims against existing businesses is high relative to the cost of new investment, there is a strong incentive for further business investment. According to this theory, therefore, the combination of strong gains in the real value of financial claims against nonfarm businesses with the recent low relative price of capital goods (discussed earlier in this chapter) implies the likelihood of renewed strength of business investment.

DEBT AND SAVING

In the second quarter of 1986, the ratio of household debt to disposable personal income was at a postwar high of 86.2 percent. The ratio of total consumer debt to disposable personal income was also at a postwar high. Over the 4 years of the current expansion, the personal saving rate (the ratio of personal saving to disposable personal income) has averaged only 5.2 percent, versus a postwar average of 6.8 percent. In 1986, the personal saving rate was only 3.9 percent—the lowest personal saving rate since 1949. The concern is often expressed that with high levels of debt and low saving rates, households may not be able to sustain the growth of consumption spending that has been the mainstay of the current expansion. Even more worrisome, in the event of an economic downturn, households might be forced to cut back sharply on consumption, and difficulties might arise for the financial system if debtors could not meet their financial obligations in a timely manner.

Although these concerns have merit, especially for some heavily indebted households, their importance for the general economy should not be exaggerated. Real household net worth—the excess of the real value of household assets over the real value of household liabilities—has been growing strongly. The current ratio of household net worth to GNP or to disposable personal income is high by the standards of the 1970s. For the aggregate of all U.S. households, increased borrowing over the past 8 years has, in effect, financed increased gross asset holdings, rather than increased consumption. For the reverse to be true, real household net worth would need to have fallen, rather than risen both absolutely and relative to GNP and disposable personal income. The fact that some of the growth of real household net worth has been accounted for by nonprofit institutions somewhat diminishes, but does not overturn, the force of this point.

In assessing saving behavior, it is important to take account of business saving from retained earnings and depreciation that is not counted as part of personal saving, but is part of private saving and of national saving. During this expansion, gross business saving has averaged 13.5 percent of GNP, exceeding the postwar average of 12.0 percent. The ratio of gross private saving (personal saving plus gross business saving) to GNP in this expansion, has averaged 17.3 percent, versus a postwar average of 16.7 percent.

Further, in assessing private saving behavior, it is important to take account of significant changes in real household net worth. Studies have shown that at a given level of disposable personal income, higher household net worth induces higher consumption spending. Alternatively, it might be that when households enjoy gains in net worth due to increases in the value of assets they already own, they decide to save less of their income. Either story fits reasonably well with the recent experience of large gains in real household net worth, strong growth of real consumption expenditures, and a low personal saving rate.

Some potential remains for further capital gains on existing productive assets. For example, the ratio of the New York Stock Exchange Common Stock Price Index to the GNP implicit price deflator increased 77 percent between 1982 and 1986, but is still below the peaks recorded in the 1960s. However, much of the recovery of real asset values, due to the decline in inflationary expectations and renewed optimism in future U.S. economic performance, may already have been realized. Moreover, in the 1950s and 1960s, when households enjoyed significant capital gains on equity holdings and the ratio of net worth to disposable personal income was as high as it is now, the personal saving rate was above levels recorded recently.

At some point, therefore, the measured rate of personal saving will probably need to rise above its 1986 level to maintain strong gains in real household net worth. This suggests that while growth of consumer spending can continue to make significant contributions to total demand growth, at some point real consumer spending will need to grow less rapidly than real disposable personal income and real GNP. The economic projections discussed at the end of this chapter take account of these likely developments.

PRODUCTIVITY GROWTH AND REAL PER CAPITA GNP

Productivity growth is the main determinant of the economy's long-run capacity to generate increases in real living standards, as measured by the growth of real per capita GNP. When labor productivity (output per hour) was growing at a relatively strong 2.8 percent annual rate between the cyclical peak in 1948 and the cyclical peak in 1973, real per capita GNP grew at a relatively strong 2.2 percent annual rate. However, as reported in Table 1-2, when the growth rate of labor productivity fell after 1973, so did the growth rate of real per capita GNP.

TABLE 1-2.—*GNP, productivity, and employment measures, 1948–86*

[Average annual percent change]

Period	Real GNP	Real per capita GNP	Labor productivity[1]	Employment-total population ratio[2]
1948 IV to 1973 IV	3.7	2.2	2.8	−0.3
1973 IV to 1981 III	2.2	1.1	.7	.9
1981 III to 1986 III	2.5	1.5	1.2	.8

[1] Output per hour of all persons engaged in the business sector.

[2] Ratio of business sector employment to population including Armed Forces overseas.

Sources: Department of Commerce (Bureau of Economic Analysis), Department of Labor (Bureau of Labor Statistics), and Council of Economic Advisers.

Factors other than labor productivity growth also influence growth of real per capita GNP and hence growth of real living standards. The broadest aggregate for which labor productivity is measured is the business sector of the economy, which currently accounts for about 80 percent of real GNP. Changes in the relative size of the business sector affect the relationship between growth of measured labor productivity and growth of real per capita GNP. This relationship is also affected by changes in average hours worked and in the ratio of people employed to the total population. In particular, since 1973, the growth rate of the ratio of employment to total population has exceeded the rate of decline of average hours worked. This has contributed to stronger growth of real per capita GNP than of labor productivity. Demographic developments suggest, however, that this source of growth of real per capita GNP will not be much stronger over the next decade than it has been over the past decade. Hence, prospects for maintaining the growth rate of real per capita GNP, and for securing increases in this measure of the growth of real living standards, depend critically on maintaining and strengthening growth of labor productivity.

LABOR PRODUCTIVITY GROWTH

Labor productivity is influenced by several important factors: the human capital of the labor force (education, training, experience, and skill); the amount of physical capital, land, and other resources available to cooperate with labor in the production of goods and services; and the technical efficiency of production processes. In the short run, labor productivity is also affected by cyclical fluctuations because businesses typically cut output more than employment during recessions and achieve large increases in output without comparable increases in employment during strong expansions. To assess underlying trends in labor productivity, it is useful to abstract from these cyclical influences. This calculation is provided in Table 1-3 by comparing periods whose endpoints correspond to business cycle peaks (treating the third quarter of 1986 as an end point).

TABLE 1-3.—*Labor productivity growth rates by sector, 1948-86*

[Average annual percent change]

Period	Business sector				
	Total	Farm	Nonfarm		
			Total	Manufacturing	Nonmanufacturing
1948 IV to 1973 IV	2.8	5.1	2.3	2.7	2.1
1973 IV to 1981 III	.7	4.3	.6	1.5	.1
1981 III to 1986 III	1.2	1.3	1.1	3.8	.1
Postwar trend:					
1948 IV to 1986 III	2.2	4.5	1.8	2.6	1.5

Note.—Data are for output per hour of all persons.

Sources: Department of Labor (Bureau of Labor Statistics) and Council of Economic Advisers.

Several factors contributed to the slowdown in labor productivity growth that began in the early 1970s. Entry into the labor force of large numbers of new workers who, on average, were less skilled and less experienced than existing workers, tended to depress labor productivity. Growth of capital-labor ratios in the private business sector slowed somewhat during the 1970s. Large increases in the price of energy in the middle and late 1970s diminished the economic efficiency of much existing capital, and required that new investment and research and development be directed toward improving energy efficiency.

The general rate of technological advance also appears to have slowed since the early 1970s. Although difficult to measure, this slowdown in technological progress seems to have affected most industrial countries. Other factors, such as slower growth of real outlays for research and development, and the rising costs of regulatory compliance, have also been linked to the decline in productivity growth during the 1970s. Most economists conclude, however, that a large portion of the decline in productivity growth remains unexplained, except by a decline in technological progress that is difficult to attribute to any identifiable source.

SECTORAL PRODUCTIVITY PERFORMANCE

In the current business cycle, the labor productivity growth in both total business and in nonfarm business has picked up from the preceding two cycles, but remains well below the postwar average. In manufacturing, the increase in labor productivity growth has been much more dramatic. Over the past 5 years, the annual rate of labor productivity growth in manufacturing has been 46 percent above the postwar average and is more than double the rate of increase recorded in the previous two cycles.

Labor productivity growth in manufacturing is critical for the international competitiveness of the U.S. economy because exports and imports of manufactures dominate U.S. trade. As is discussed in Chapter 3, weak productivity growth is not the cause of the deterioration of the international competitive position of U.S. manufacturing, although stronger productivity growth could always help improve this position. In fact, the combination of strong labor productivity growth and restrained wage growth (in comparison with productivity and wage developments in other leading industrial countries) has reduced the relative unit labor costs of U.S. manufacturers—a fact that has been concealed until recently by the strong appreciation of the U.S. dollar between 1980 and early 1985.

During the current cycle, productivity growth remained near zero in nonfarm business outside manufacturing. Although no official estimates are published, very sluggish productivity growth in service-producing industries (which produce nearly 90 percent of real GDP of nonfarm nonmanufacturing industries) must primarily account for this poor performance. The addition of large numbers of younger, less-experienced, less-skilled workers to service sector employment probably contributed to sluggish productivity growth in this sector. Although many employees in service sector industries (such as health care, and banking and finance) are high-skill, high-wage workers, wage rates in service sector industries are generally below average wage rates in manufacturing, indicating that skill levels are also lower. Specifically, wage rates are relatively low in the two service sector industries (retail trade and personal and business services) that have recorded the strongest employment gains since 1981.

Problems in measuring productivity in service-producing industries may be partly responsible for low measured productivity growth in this sector. To measure productivity growth, it is necessary to divide increases in the nominal value of an industry's product into increases in price and quantity. It is difficult to make this distinction when the composition and quality of an industry's output is changing, particularly for service-producing industries where no easy way exists to define and measure a unit of output of constant quality. Indeed, for some service industries, such as certain types of medical care and private education and research, it is assumed that labor productivity growth is zero. There is little evidence, however, that the slowdown in measured service-sector productivity growth since the early 1970s is attributable to more severe measurement problems. Nevertheless, it should be recognized that a shift of output toward lower productivity service industries would reduce measured productivity growth for all business.

PROSPECTS AND POLICIES FOR PRODUCTIVITY GROWTH

Slower measured labor productivity growth since mid-1984, relative to that recorded earlier in this expansion, probably partly reflects the usual cyclical effect of slower output growth on productivity growth. If real output growth accelerates in accord with Administration projections (discussed in the next section), then productivity growth should increase. Thus, the macroeconomic developments and policies that underlie the Administration's forecast of moderately stronger real GNP growth are critical for near-term prospects for stronger productivity growth.

Four important developments also seem likely to contribute to stronger long-term productivity growth. First, as the labor force on average grows older and more experienced over the next 15 years, labor productivity is likely to advance more rapidly. Second, the recent decline in energy prices should allow for some labor productivity improvement, especially in energy-intensive industries. Third, expenditures on research and development, which declined as a share of GNP in the 1970s, have been increasing since 1978 and should contribute to a higher rate of technological progress. Fourth, as is discussed in Chapter 2, tax reform may have a small negative effect on the long-run capital stock, which would tend to depress labor productivity. However, tax reform will also reduce distortions affecting the distribution of capital among productive activities. A more efficient distribution of capital should contribute to higher productivity.

Productivity can be promoted by avoiding policies that inhibit the efficient functioning of private businesses and competitive markets. For example, productivity is impeded by subsidies that keep unprofitable and inefficient firms in business, at the expense of more profitable and efficient firms that must ultimately finance such subsidies. This applies not only to direct subsidies, but also to tax subsidies and to protectionist measures that provide subsidies by forcing consumers to pay higher prices. Particularly troublesome are protectionist measures applied to intermediate products. They increase production costs and diminish economic efficiency for industries that use these products, injuring their ability to compete with foreign firms, as is discussed further in Chapter 4. Government can also contribute to stronger productivity growth by eliminating or reducing burdensome and inappropriate regulation. A number of initiatives in this area are discussed in Chapter 6.

Government has a critical role to play in education, which equips individuals with the basic knowledge and skills to be productive workers and lays the basis for much scientific and technical advance. The key governmental responsibility in education is that of State and local governments that fund and operate most of the Nation's primary and secondary schools, as well as its public colleges and universities. In this regard, it is noteworthy that standardized measures of educational performance in the Nation's primary and secondary schools have been improving for about the past 10 years, following a long period of decline during the 1960s and 1970s. Improved incentives for educational performance through enhanced merit pay for teachers might contribute to these developments. Increased parental influence over school performance through tuition voucher systems also might contribute to this end.

The Federal Government has an important role in funding basic scientific research. Such research can contribute to technological advance in the longer term. However, its benefits are often too diffuse and difficult to profit from for it to be undertaken by private business. Included in this category are basic and some applied research in biomedicine that not only contribute directly to human welfare, but also help to improve the health component of human capital.

The ultimate objective of policies to improve productivity is to enhance human welfare and increase real living standards. Government policies serve these objectives by encouraging investment in human and physical capital, improvement of productive technology, and allocation of resources to their highest valued uses. The President will soon present initiatives to enhance the Federal Government's contribution in these areas. This will aid in the reversal that is already under way of the forces that previously limited productivity growth.

There is good reason to believe that rising labor productivity and a falling unemployment rate will further raise real per capita GNP and the real living standards of Americans in 1987 and beyond.

ECONOMIC POLICIES AND OUTLOOK

The future performance of the U.S. economy depends primarily on the productive activities of individuals and businesses. Government policies enhance economic performance by allowing the private enterprise system to function as freely as possible, by maintaining a stable macroeconomic environment, by providing essential public goods and services and support for the needy, and by correcting externalities, distortions, and deficiencies in the operation of the economic system. Policies that serve these vital purposes are examined throughout this *Report*. Two broad areas of macroeconomic policy—monetary policy and fiscal policy—require specific discussion before presenting the Administration's economic projections.

FINANCIAL DEREGULATION, VELOCITY, AND MONETARY POLICY

The movements in real interest rates, inflation, and asset prices, as well as structural and regulatory changes in the financial services industry, have altered the institutional environment in which monetary policy is conducted. Apparently as a result of both deregulation and disinflation in the 1980s, the velocity of money has behaved unusually, and measures of the monetary aggregates that historically have been most reliable have become less dependable guides to monetary policy. The velocity of money is the ratio of nominal GNP to the money supply. If velocity behavior is reasonably predictable, then control of monetary aggregates is a useful approach to the conduct of monetary policy, and measures of the monetary aggregates can provide important information about the likely economic impact of monetary policy. The unusual behavior of velocity and the monetary aggregates in recent years implies increased uncertainty about the meaning and appropriateness of a given rate of money growth.

With higher inflation and nominal interest rates in the 1970s, the effectiveness of interest rate ceilings and other restrictions on deposits was gradually eroded. In many cases, competitive market forces found ways to circumvent these regulations, and the effects of existing regulations were widely perceived as inequitable or destabilizing. In response, the Depository Institutions Deregulation and Monetary Control Act of 1980 and the Garn-St Germain Depository Institutions Act of 1982 mandated elimination of most of the regulations on deposit interest rates that had been in place since the 1930s. The deregulation of deposit interest rates was largely completed in 1986 when the remaining regulations on consumer-owned transactions accounts were removed in January and the interest rate ceiling on passbook savings accounts was removed in March. Depository institutions are now free to pay market-determined rates on all consumer-owned deposits, and no legal restrictions remain on the maturity or minimum size of such deposits.

These and previous regulatory changes, as well as shifts in consumer preferences in response to changes in inflation and interest rates, have altered the composition of the monetary aggregates. For example, interest-bearing transactions deposits accounted for less than 10 percent of M1 (currency plus transactions deposits) before 1981; since then, interest-bearing transactions deposits have grown to nearly one-third of M1, while non-interest-bearing demand deposits have declined from their historical share of 75 to 80 percent of M1 to approximately 40 percent at the end of 1986. Similarly, the composition of the broader monetary aggregate, M2, has been affected by the availability of interest-bearing transactions deposits and the relaxation of interest rate ceilings on time deposits. Passbook savings deposits, for example, accounted for more than one-half of M2 in the mid-1960s, but for only about 13 percent of M2 by the end of 1986.

The Behavior of Velocity

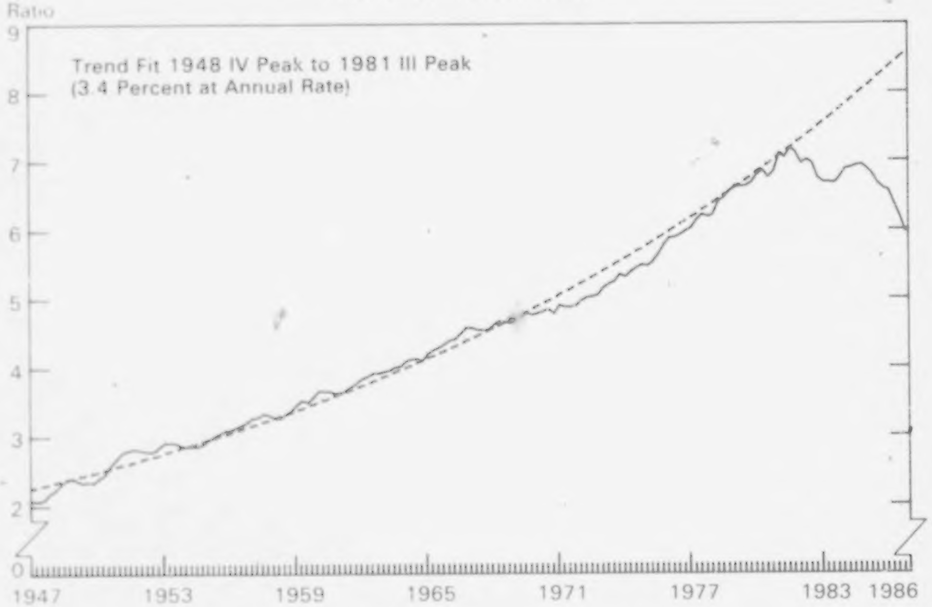
As illustrated in Chart 1–6, for most of the postwar period until recently, the growth of M1 velocity has been reasonably stable. On a quarter-to-quarter basis, of course, M1 velocity has always experienced sizable fluctuations, and M1 velocity historically has shown a cyclical component. Nevertheless, over longer periods, M1 velocity has not deviated very far from its long-term trend. However, in the 1980s and particularly since the cyclical trough of 1982, M1 velocity has fallen markedly below its postwar growth path. For the broader monetary aggregates, velocity was typically less stable than M1 velocity earlier in the postwar period, and a sharp downturn in velocity for these broader aggregates has also occurred in the 1980s.

The recent aberrant behavior of velocity raises important questions for the conduct of monetary policy. Is the behavior of velocity in the 1980s evidence of a permanent breakdown of any reliable relationship between money and income growth? Or, is that basic relationship intact, with its characteristics altered (temporarily or permanently) by deregulation of bank deposits, declining inflation and interest rates, or some combination of the two? If so, can a measure of the money supply be devised that preserves a reliable relationship between it and GNP growth? Although considerable empirical research has investigated these and related questions, it offers no completely satisfactory explanation of recent velocity behavior. However, some inferences can be drawn from the evidence currently available.

Chart 1-6

Velocity of M1

Ratio of Nominal GNP to M1



Sources: Department of Commerce and Board of Governors of the Federal Reserve System.

The available evidence does not justify the conclusion that the basic money-income relationship has become permanently unreliable. To the contrary, some researchers have specified stable demand for money functions or expressions for velocity that are robust to changes in income variables, interest rate variables, and sample periods. For example, recent empirical research identifies a break in the trend growth of velocity in the third quarter of 1981, and once that change is accounted for statistically, the relationship is stable.

It is much less clear, however, what caused the shift in the trend of velocity. The change in the trend of velocity apparently occurred too late to be attributable to the 1979 change in Federal Reserve operating procedures. Similarly, the shift is not closely associated in time with increased volatility of interest rates. Also, the evidence suggests that the record trade deficits of the 1980s have contributed little to the observed decline in velocity.

A number of empirical studies indicate that the decline in M1 velocity in the 1980s is not primarily a reflection of shifts of funds into M1 induced by the introduction of new types of deposit accounts. This view is supported by the fact that a similar shift in the trend growth of velocity is observed if velocity is calculated using either currency held by the public or the monetary base. In addition, if velocity is measured using a monetary aggregate that excludes the interest-bearing accounts now included in M1, some evidence remains of a decline in velocity, albeit a less steep decline. Moreover, even though M2 would be expected to be less distorted by financial deregulation, M2 velocity has also behaved atypically during the 1980s, although its aberration has been less pronounced than that for M1.

It appears that inclusion of interest-bearing deposits in M1 has increased the interest-elasticity of the demand for money. With an increased interest-elasticity, declining interest rates of the past 4 years would explain more of the decline in velocity than can be explained with lower interest-elasticities. It is also possible that the decline in expected inflation in recent years has exerted additional downward pressure on velocity growth, beyond the effect of expected inflation on interest rates. Much of the empirical evidence available at this time suggests that an increased interest-elasticity of the demand for money in combination with the fall in interest and inflation rates may well in time provide the best explanation of the unusual velocity behavior of the 1980s.

Finally, the demand for money balances is presumably affected by the spread between market interest rates and those paid on deposits. After a long history of legal restrictions on deposit interest rates, these rates have been relatively slow to adjust to changing market conditions since the restrictions were removed. It is therefore plausible that part of the M1 growth that occurred in 1985 and 1986 is related to declines in market interest rates that reduced the opportunity cost of holding M1 balances. Over time, additional changes in market rates relative to deposit rates would be expected to affect the demand for M1. But with only limited experience in a deregulated environment, it is difficult to predict how deposit rates will be adjusted to changes in market interest rates and how the public will respond to changes in relative interest rates.

Federal Reserve Policy

Two opposing types of risk are inherent in the conduct of monetary policy. One risk is that monetary policy might be too expansionary and that excess monetary growth will ultimately generate higher inflation and the subsequent need to disinflate. The second risk is that inadequate monetary growth might constrain the growth of real economic activity. While the balancing of these two types of risk is never easy, the task has been made more difficult in recent years by the unusual pattern of velocity behavior, which reflects a less reliable relation between money and nominal GNP growth.

In 1986, monetary policy was influenced by a wide range of economic and financial market developments. In the first 4 months of 1986, market interest rates declined substantially as the oil price declines and other price developments had favorable effects on the near-term outlook for inflation. In this period, the Federal Reserve Board reduced the discount rate twice in order to realign it with lower market rates. Money growth was relatively modest early in the year as M1 expanded along the upper bound of its target range and the broader aggregates were within or below their prescribed ranges. As evidence of economic weakness emerged in the second quarter and inflation remained subdued, the Federal Open Market Committee (FOMC) voted in July to ease reserve conditions and the Federal Reserve Board approved another cut in the discount rate, again largely in response to additional downward movements in market interest rates that had occurred in June. Even though M1 growth accelerated rapidly beginning in the spring, these accommodative policy actions were judged appropriate in light of the fact that the broader monetary aggregates remained within their target ranges, and uncertainty continued about the reliability of the linkage between M1 and nominal income growth.

Similar policy actions were adopted again in August as economic activity continued to appear sluggish and the broader aggregates still grew at moderate rates, despite very rapid M1 growth. Because each of the discount rate cuts in 1986 occurred after general declines in market interest rates, the discount rate followed, rather than led, interest rate movements. However, following the April and August discount rate cuts, market interest rates generally increased. In addition, in the 2 months immediately following the August discount rate cut, long-term interest rates rose both absolutely and relative to short-term rates, resulting in a steepening of the yield curve. This illustrates the limitations on the capacity of discount rate cuts to secure lasting reductions in market interest rates.

By the summer of 1986, the broader monetary aggregates were also growing more rapidly and M2 reached the upper bound of its target range in August. The FOMC appeared to become more concerned about the inflationary potential of money growth, a concern that had been apparently discounted earlier in the year when M1 alone was growing rapidly. Implicit in these decisions was the judgment that with the uncertainty about M1 velocity, the broader monetary aggregates were more reliable guides to monetary policy than M1. From the fourth quarter of 1985 to the fourth quarter of 1986, M1 growth averaged more than 15 percent, well above the Federal Reserve's target range of 3 to 8 percent. M2 growth from the fourth quarter of 1985 to the fourth quarter of 1986 was just at the upper bound of its 6 to 9 percent target range.

Although the full consequences of monetary policy actions are often not felt for more than a year afterwards, the record in 1986 suggests that the Federal Reserve did a reasonably good job in balancing the risk of inadequate money growth against the long-term inflationary risk of too much money creation. As the economy expanded more slowly than expected during the year and inflation continued to be moderate, the Federal Reserve allowed M1 growth to exceed its predefined target range and relied more heavily on a broader range of economic data. Further depreciation of the dollar in 1986 was apparently not interpreted as a signal of the need for slower money growth, probably because real dollar depreciation was widely regarded as desirable to improve U.S. international competitiveness, and because the lower dollar had little visible effect on the inflation rate. In the context of moderate real growth, very low inflation, and falling inflation expectations and given the uncertainty about the behavior of velocity, the de-emphasis of M1 in favor of other variables to gauge the conduct of monetary policy appears to have been an appropriate judgment.

Despite weaker-than-expected economic growth in 1986, no evidence suggests that the Federal Reserve has erred on the side of monetary restriction. Based on money growth, interest rates, or exchange rates, it is not reasonable to conclude that monetary policy was "too tight" in 1986. The failure of the real economy to perform as well as most forecasters had predicted is clearly related to sectoral problems, and is not the result of inadequate monetary expansion. In particular, the adverse effects on the energy sector of the oil price declines, the further deterioration of the trade balance, and the continued stress in the agricultural sector together appear to have limited economic growth in 1986.

One cannot dismiss the fact, however, that by historical standards, M1 growth in 1986 was high. It substantially exceeded the Federal Reserve's own target range, as well as most analysts' a priori views of appropriate money growth. Until a more reliable relationship between M1 and nominal income growth is reestablished, however, the implications of this rapid M1 growth remain uncertain. Given the various factors discussed above that appear to be working to alter—at least temporarily—the relationship between money and GNP growth, rates of monetary expansion that would have previously implied a resurgence of inflation appear to have been necessary in recent years to satisfy an increase in the demand for real money balances relative to income. Although the nature of the change in velocity behavior is not fully understood at this time, no plausible assessment of the change in velocity growth would imply a permanent need for such rapid money growth. Analysts agree that at some point the rate of monetary growth must be reduced if the ultimate goal of price stability is to be achieved. The difficult policy issue is one of timing—to assess when sufficient money growth has been provided to satisfy increased demand for money balances and to determine the extent to which money growth should be decelerated.

From the outset, the Administration has emphasized the importance of promoting sustainable real economic growth within an environment of long-run price stability. With a continuation of slower than expected economic growth, moderate inflation, and serious stress in some sectors of the economy, the dangers of a monetary restriction of economic activity are real and important. Given the economic dislocation associated with the rise of inflation in the 1970s and its reduction in 1981-82, the Nation also cannot afford to ignore the dangers of allowing a reacceleration of inflation and the inevitable economic cost of disinflation.

THE MACROECONOMIC EFFECTS OF DEFICIT REDUCTION

In fiscal 1986, the Federal deficit amounted to 5.3 percent of GNP. Under the provisions of the Balanced Budget and Emergency Deficit Control Act of 1985, commonly referred to as Gramm-Rudman-Hollings (GRH), the deficit is scheduled to decline gradually to zero by fiscal 1991. As outlined in the President's 1988 budget, it is assumed that deficit reduction will be achieved primarily through restraining Federal spending, not by raising taxes. In the long run, this approach to deficit reduction should contribute to economic growth by freeing resources that would have been used by the Federal Government for more efficient use by the private sector. Also, by avoiding tax increases, this approach protects private incentives to work, save, and invest.

The analysis of the prospects for reducing the Federal deficit, presented in Chapter 2 of this *Report*, provides several facts relevant for assessing the probable short-term macroeconomic effects of deficit reduction. First, net interest expense of the Federal Government as a share of GNP will decline by 1 percentage point, implying an equal reduction in the Federal deficit as a share of GNP. This decline in net interest expense will occur provided that the economy grows and interest rates decline in accord with the Administration's projections, and provided that growth of the stock of Federal debt is slowed by reducing the Federal deficit in accord with the GRH targets. Second, Federal receipts as a share of GNP are projected to rise by 0.9 of a percentage point between fiscal years 1986 and 1991. A small part of this rise is due to already scheduled increases in social security payroll taxes, but most is due to the expected revenue benefits of continued economic growth. Third, excluding net interest expense and social security benefits (which are projected to maintain approximately a constant share of GNP), the composite of all other Federal spending amounted to $655 billion in fiscal 1986, or 15.7 percent of GNP. If real spending on this composite stayed constant at fiscal 1986 levels, projected real economic growth between fiscal years 1986 and 1991 would reduce the share of such spending in GNP by 2.4 percentage points.

It is plausible to suppose that these three sources of deficit reduction, which jointly account for 81 percent of the required reduction in the Federal deficit as a share of GNP, will not generate any significant, short-run, negative macroeconomic effects. Reaching the GRH target of a balanced budget by fiscal 1991, however, will require more than holding constant real government spending on the composite that excludes net interest and social security benefits. It will also require a cut of about $39 billion in real spending from this composite. As is discussed in Chapter 2, achieving such real expenditure reductions while providing for increased real Federal spending in critical areas of national need will require hard political choices. However, this magnitude of real Federal spending cuts, spread over several years, should not have serious adverse consequences for overall economic activity.

Further, it should be recognized that at some time, the Federal deficit must be reduced as a share of GNP. The potential negative macroeconomic consequences of deficit reduction are minimized by achieving deficit reduction gradually, when other economic forces appear likely to sustain economic expansion. As improved U.S. international competitiveness contributes to a smaller trade deficit, the likelihood increases that resources that might otherwise be used to satisfy rising Federal expenditures will find other uses. A noninflationary monetary policy that fosters permanent reduction in interest rates also eases the task of deficit reduction by contributing to lower net interest expense for the Federal Government.

ECONOMIC FORECAST FOR 1987

The Administration forecasts a strengthening of economic growth with continued moderate inflation in 1987. The impediments to economic growth that brought past expansions to a halt are not evident: inflation and interest rates remain low, inventory stocks are relatively lean, and resource constraints and production capacity pressures are absent. Table 1-4 summarizes key aspects of the Administration's forecast for 1987. The Administration's estimate of real GNP growth this year is 3.2 percent, measured fourth quarter to fourth quarter, compared with a growth rate of 2.2 percent in 1986. For 1987, strong growth in employment is forecast to continue and the total unemployment rate is predicted to be 6.5 percent in the fourth quarter. An improved balance of trade, an increase in inventory investment, and cessation of the economic deterioration caused by the drop in oil prices should contribute to stronger growth in 1987.

The inflation rate in 1987 is forecast to return to the 3.5 to 4 percent range of recent years, before the decline in oil prices temporarily depressed the inflation rate in 1986. Specifically, the GNP deflator is forecast to rise at a 3.6 percent annual rate during 1987, after a 2.2 percent rate of increase during 1986. During 1987, the CPI is expected to increase at a slightly faster rate than the GNP implicit price deflator, reversing the pattern in 1986. This is because the CPI embodies import prices more directly than does the GNP implicit price deflator, and import prices are expected to rise more rapidly than domestic prices because of the continuing effects of depreciation of the dollar.

TABLE 1–4.—*Economic outlook for 1987*

Item	1986[1]	1987 forecast
	Percent change, fourth quarter to fourth quarter	
Real gross national product	2.2	3.2
Personal consumption expenditures	4.0	2.3
Nonresidential fixed investment	−5.4	2.5
Residential investment	9.8	1.5
Federal purchases of goods and services	1.8	−2.5
State and local purchases of goods and services	4.6	2.7
GNP implicit price deflator	2.2	3.6
Compensation per hour[2]	2.6	4.8
Output per hour[2]	1.1	1.9
	Fourth quarter level	
Unemployment rate (percent)[3]	6.8	6.5
Housing starts (millions of units, annual rate)	1.7	1.8

[1] Preliminary.
[2] Nonfarm business, all persons; fourth quarter 1986 estimated.
[3] Unemployed as percent of labor force including resident Armed Forces.

Note.—Based on seasonally adjusted data.

Sources: Department of Commerce (Bureau of the Census and Bureau of Economic Analysis), Department of Labor (Bureau of Labor Statistics), and Council of Economic Advisers.

The Administration's forecast embodies the following assessments for the four main components of GNP: consumption, investment, government spending, and net exports. First, growth of real consumption spending is forecast to slow from the 4.0 percent annual growth rate in 1986, but is still expected to make a substantial contribution to real GNP growth in 1987. As discussed earlier, a rapid increase and high level of real household net worth tend to raise consumption spending. However, the relatively low personal saving rate in 1986 suggests that households may wish to hold growth of consumption spending below that of disposable personal income in order to restore personal saving rates to more normal levels. Moreover, the boost to real disposable personal income, and hence to real consumption spending, from the sharp decline in oil prices in 1986, is unlikely to be repeated in 1987.

Second, real investment is expected to strengthen because of gains in nonresidential fixed investment and inventory investment, despite a substantial slowdown in residential investment growth. Real nonresidential fixed investment fell in 1986, partly because of the problems of the oil and gas industry and perhaps also because of some short-run adverse effects of the tax reform process. Lower interest rates, rising corporate profits, stronger economic growth, and (as previously explained) a high ratio of the market value of financial claims for ownership of business enterprises to the price of capital goods should contribute to some strengthening of real nonresidential fixed investment in 1987. Real residential investment, however, seems unlikely to repeat the strong growth performance of 1986. In particular, high vacancy rates and the effects of tax reform may inhibit growth of multifamily housing construction. Concerning inventory investment, it is noteworthy that manufacturing inventories have generally been falling for more than a year and a half and the inventory-sales ratio is currently low for other sectors as well. With continued growth of domestic sales and improvement in net exports, producers should begin accumulating inventories at a faster pace.

Third, given their relatively strong budget positions, continued modest growth of real spending by State and local governments seems probable. In contrast, the program to reduce the Federal fiscal deficit should lead to a modest reduction in real Federal purchases of goods and services in 1987.

Fourth, after deducting 0.7 percent from economic growth in 1986, real net exports are expected to contribute a similar amount to growth in 1987. The falling dollar appears finally to be influencing the prices of non-oil imports. The fixed-weighted price index for non-oil imports rose 9.4 percent during 1986 and further increases are expected in 1987. Higher relative prices for goods imported into the United States and lower relative prices of U.S. exports in foreign markets should improve U.S. net exports.

A special factor that should aid real GNP growth in 1987 is the end of the decline of production and investment in the domestic oil and gas industry. Following the oil price drop in early 1986, drilling operations for gas and oil plummeted, pulling down nonresidential fixed investment for most of the year. If oil prices remain near yearend levels, declining activity in the domestic oil and gas industry should not continue to detract from real GNP growth in 1987. While the direct effects of lower oil prices were largely completely absorbed by the economy in 1986, secondary benefits may still be forthcoming.

ECONOMIC PROJECTIONS FOR 1988-92

The Administration's longer term economic projections represent expected trends and should not be interpreted as year-to-year forecasts. They reflect the long-run economic policy goals of the Administration and long-run trends in the economy. Specifically, it is assumed that the incentives for economic activity embodied in the reduced marginal tax rates contained in the Tax Reform Act of 1986 are preserved and that further gains are made in reducing government spending and the burden of government regulation. Also, the Federal Reserve is assumed to continue a policy that is both consistent with gradual achievement of the long-term goal of price stability and not so restrictive as to impair economic growth.

The Full Employment and Balanced Growth Act of 1978 requires the *Economic Report of The President*, together with the *Annual Report of the Council of Economic Advisers*, to include an Investment Policy Report and review progress in achieving goals specified in the Act. The projections for 1987 through 1992 summarized in Table 1–5 constitute the "...annual numerical goals for employment and unemployment, production, real income, productivity and prices...", prescribed by this Act. The projections go far in achieving the goals specified in the Act for unemployment and inflation, while achieving many other aims of the legislation such as balanced growth, reduced Federal spending, adequate productivity growth, an improved trade balance, and increased competitiveness of agriculture, business, and industry. Although the goal of 4 percent unemployment, specified in the legislation, is not attained by 1992, this does not indicate a lack of commitment to achieving full employment. On the contrary, the Administration is dedicated to bringing about full employment and stable prices by creating an environment conducive to healthy and sustained economic growth. There are no quick fixes to reach the legislation's stated goals; government best serves these goals by allowing private enterprise to flourish, thereby generating long-term growth and full utilization of resources in a noninflationary environment.

Specifically, the Administration's economic projections detailed in Table 1–5 show real GNP growth rising to 3.6 percent in 1989 and declining slowly to 3.4 percent in 1992. Stronger real growth reflects the long-term benefits of tax reform, as well as factors that will improve growth in the current year and carry forward in later years. Further improvements in real net exports are expected, especially in

TABLE 1-5.—*Administration economic assumptions, 1987–92*

[Calendar years]

Item	1987	1988	1989	1990	1991	1992
	Percent change, year to year					
Real GNP	2.7	3.5	3.6	3.6	3.5	3.4
Real compensation per hour[1]	.8	2.0	1.8	1.7	1.8	1.9
Output per hour[1]	.9	2.2	2.0	1.9	1.9	1.9
Consumer price index[2]	3.0	3.6	3.6	3.2	2.8	2.2
	Annual level					
Employment (millions)[3]	113.5	115.8	118.0	120.2	122.0	123.9
Unemployment rate (percent)[4]	6.7	6.3	6.0	5.8	5.6	5.5

[1] Nonfarm business, all persons.

[2] For urban wage earners and clerical workers.

[3] Includes resident Armed Forces.

[4] Unemployed as percent of labor force including Armed Forces.

Source: Council of Economic Advisers.

1988. Higher production will lift incomes and consumption, and business investment should strengthen further in 1988 and beyond. Production is projected to grow sufficiently rapidly to lower the unemployment rate to 5.5 percent by 1992. Consistent with gradual achievement of the long-term goal of price stability, the inflation rate is projected to decline to 2.2 percent by 1991. Productivity growth is projected to improve from recent levels because of the normal cyclical effect of stronger output growth and because of expected improvements (discussed earlier) in the trend rate of growth of labor productivity. Coincident with this improvement in productivity growth, increases are expected in real compensation per hour.

These projections reflect the Administration's policies to promote long-term, noninflationary growth by encouraging investment in physical and human capital and improvements in productive technology. The Administration believes that creating an economic environment that provides strong incentives for work and production is the best policy for promoting investment and productivity growth. Reducing disparities in the rate of taxation on different economic activities contributes to this result by encouraging resources to be allocated to activities where they can be used most productively. Chapter 2 describes how the Tax Reform Act of 1986 promotes these goals. Also, as is discussed in Chapter 2, Federal spending restraint will free resources to be invested more productively to support growing domestic and foreign demands for U.S. products. Chapters 3 and 4 describe policies to improve the U.S. trade balance.

UNDERLYING TRENDS IN ECONOMIC GROWTH

Long-run growth in the economy is governed by expansion in the economy's capacity to produce. Growth in the working-age population, in labor force participation rates, and in output per person all play a role in this expansion. Table 1-6 outlines the contributions to growth of these factors for historical periods beginning and ending at cyclical peaks, for the current cycle so far, and for the projection period. The table presents a simple progression of steps from population growth to GNP growth.

TABLE 1-6.—*Accounting for growth in real GNP, 1948–92*

[Average annual percent change]

Item	1948 IV to 1981 III	1973 IV to 1981 III	1981 III to 1986 IV [1]	1986 IV [1] to 1992 IV
GROWTH IN:				
1) Civilian noninstitutional population aged 16 and over	1.5	1.8	1.2	.9
2) PLUS: Civilian labor force participation rate	.2	.5	.5	.6
3) EQUALS: Civilian labor force	1.8	2.4	1.7	1.5
4) PLUS: Civilian employment rate	−.1	−.4	.1	.3
5) EQUALS: Civilian employment	1.7	2.0	1.8	1.8
6) PLUS: Nonfarm business employment as share of civilian employment	.1	.1	.2	.2
7) EQUALS: Nonfarm business employment	1.7	2.1	2.0	2.0
8) PLUS: Average weekly hours (nonfarm business)	−.4	−.6	−.1	−.1
9) EQUALS: Hours of all persons (nonfarm business)	1.4	1.5	1.9	1.9
10) PLUS: Output per hour (productivity, nonfarm business)	1.9	.6	1.1	1.9
11) EQUALS: Nonfarm business output	3.3	2.0	3.0	3.8
12) LESS: Nonfarm business output as share of real GNP	.0	−.1	.5	.3
13) EQUALS: Real GNP	3.3	2.2	2.4	3.5

[1] Data for 1986 IV are preliminary.

Note.—Based on seasonally adjusted data. Detail may not add to totals due to rounding.

Sources: Department of Commerce (Bureau of the Census and Bureau of Economic Analysis), Department of Labor (Bureau of Labor Statistics), and Council of Economic Advisers.

First, the sum of population growth and growth in the labor force participation rate determines growth in the labor force. While growth of the adult population has been slowing for some time as the last of the baby-boom generation passes into working age, the participation rate continues to climb. Continued growth in the participation rate of women and the incentives for increased work effort provided by tax reform imply growth of the labor force well into the 1990s. A growing labor force coupled with further reductions in the unemployment rate (represented by increases in the employment rate in the table) determine employment growth for 1987-92 that is expected to match the 1981-86 experience.

In order to use published productivity figures, employment is adjusted to cover nonfarm business only, and then translated into growth in total hours worked. The addition of growth in total hours and output per hour (labor productivity) determines growth in nonfarm business output. Recently, productivity gains in sectors other than manufacturing have been disappointing. Expectations of future gains, although above recent productivity growth, have been scaled back somewhat from previous projections. Productivity is projected to increase at approximately 1.9 percent, on average, over the 1987-92 period, up 0.8 of a percentage point from rates experienced in the current cycle to date. After adjustment for the stronger relative rate of growth of the nonfarm business sector, the growth rate of real GNP is given in the last line of Table 1–6. The calculations in the table indicate that the projected improvement in productivity growth (output per hour) from 1.1 to 1.9 percent per year is the key to stronger real GNP growth and to the gains in real living standards that this growth will generate.

CONCLUSION

Although 1986 was not an outstanding year in terms of real GNP growth, the economic expansion proceeded on a broad front through its fourth year, and important progress was made in expanding employment and reducing inflation and interest rates. The problems that kept overall growth below expectations were largely sectoral: a decline in world oil prices that depressed employment and investment in the domestic oil and gas industry; continued difficulties in U.S. agriculture; and a further deterioration of the U.S. trade balance. Nowhere evident were the problems that usually portend the end of expansions. Rather, the economic developments of 1986 affirm that the destructive sequence of progressively rising inflation rates and interest rates, interrupted by severe recessions, has been broken. The foundation for sustainable growth of production and employment, accompanied by gradually declining inflation and unemployment, has been strengthened.

For the future, real economic growth is projected to accelerate. Inflation is projected to resume its gradual decline, after a modest upturn because of erosion of the temporary effects of the recent oil price decline. Continuation of stable macroeconomic policies is essential to realizing these projections and to avoiding cycles of inflation and disinflation that are associated with unnecessary swings in relative prices, real interest rates, and real asset values, and ultimately with many of the structural and sectoral problems that still beset the U.S. economy. In particular, monetary policy faces a difficult task in a period when the traditional guideposts for its conduct have become less reliable. It must continue to tread cautiously between the risk of inadequate money and credit creation that would jeopardize economic expansion in the short run, and the risk of excessive monetary growth that would reignite inflation and seriously damage economic performance in the long run.

Ultimately, the long-run growth rate of the economy and the growth of real living standards depend primarily on the productivity of individuals and businesses operating in the private sector. As discussed here and in later chapters of this *Report*, government has an important role to play in enhancing the efficiency and productivity of the economic system. Its principal contribution is to maintain a stable macroeconomic environment and to allow the natural incentives of the flexible, private enterprise system to stimulate individuals and businesses to increase the quantity and enhance the quality of productive resources, to improve the efficiency of production processes, and to deploy the Nation's resources to their highest valued uses.

CHAPTER 2

Budget Control and Tax Reform

GOVERNMENT TAX AND EXPENDITURE POLICIES strongly influence the economy's long-run performance. Government-provided goods and services improve economic performance if their value exceeds their cost, as measured by the value of the private goods and services they displace. The cost of government-provided goods and services, in turn, depends on the efficiency of the tax system. An efficient tax system entails low and unvarying marginal tax rates that have minimal effects on private investment and consumption choices.

The Administration is committed to a policy of restructuring Federal fiscal activities to serve the national interest more effectively. Tax reform, the Administration's number one domestic priority for the past several years, has been accomplished. The Tax Reform Act of 1986 significantly lowers tax rates and will decrease tax-induced distortions in private economic decisions. Progress has also been made in Federal spending restraint. The upward trend in Federal Government expenditures as a share of gross national product (GNP), which had persisted for most of two decades, was reversed in 1984. For the first time since 1973, real Federal Government expenditure is projected to fall in fiscal 1987. Further spending restraint, however, will be necessary to achieve the future deficit targets set in the Balanced Budget and Emergency Deficit Control Act of 1985 (popularly known as Gramm-Rudman-Hollings), targets to which the Administration is firmly committed.

This chapter surveys both the Administration's accomplishments and its future agenda concerning the restructuring of Federal fiscal activities. The chapter begins with a discussion of the Federal budget deficit, the need for Federal spending restraint, and proposed changes in the budgetary process. It argues that the objective of balancing the budget by 1991 can be achieved without a general tax increase and without sacrificing programs essential to the national interest. This task will require uncompromising efforts to eliminate all unnecessary Federal spending, efforts that could be aided by appropriate reforms of the budgetary process. The chapter then turns to an assessment of the economic effects of the Tax Reform Act of 1986. It finds that tax reform, while entailing minor transition costs, significantly improves the economy's long-run economic performance. Specifically, it is estimated that national net output of goods and services increases approximately 2 percent because of the long-run consequences of tax reform. In 1986, this would have amounted to an increase of approximately $600 in the income of the average American family.

SPENDING RESTRAINT AND DEFICIT REDUCTION

The current economic expansion marks the first occasion in the postwar period when Federal deficits have exceeded 5 percent of GNP, and when very large deficits have persisted into the third and fourth years of an expansion. At comparable periods during the expansions of the 1960s and 1970s, the Federal deficit as a share of GNP was generally less than one-half the level of 1985 and 1986. The underlying cause of the growing Federal deficit is illustrated in Chart 2-1. The share of Federal spending in GNP has continued on an upward trend, while the secular trend in the share of Federal revenues has remained virtually flat.

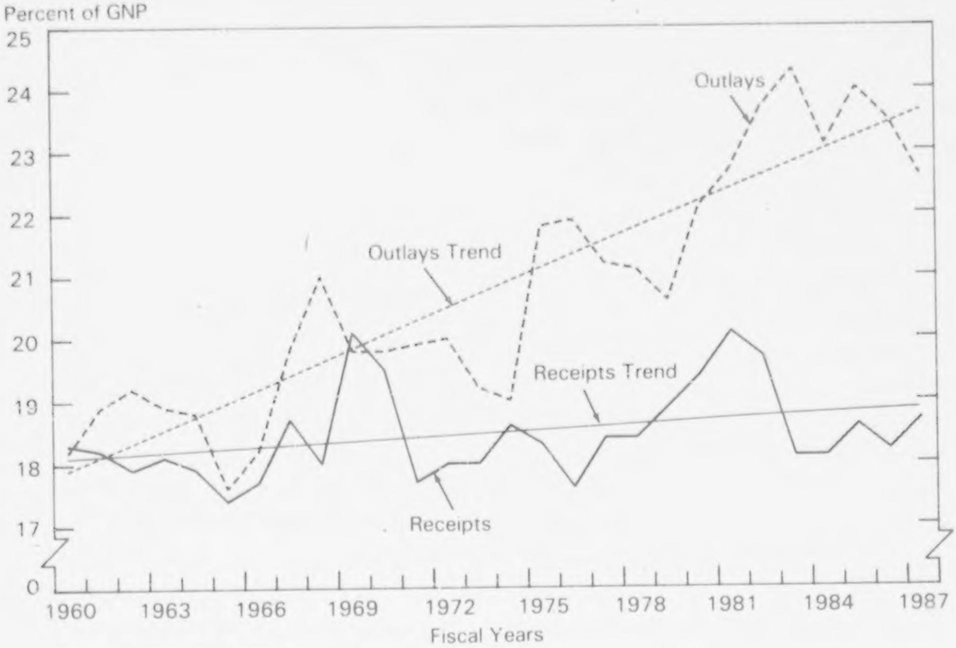
Under the provisions of Gramm-Rudman-Hollings, significant deficit reduction will occur in fiscal 1987. With moderately good economic performance and absent large new spending initiatives, the Office of Management and Budget projects that the Federal deficit will decline by almost $50 billion between fiscal 1986 and fiscal 1987, equivalent to more than a full percentage point of GNP. The Administration's proposed budget for 1988 provides for another important step in the process of deficit reduction, to the target of $108 billion, along a path to reach a balanced Federal budget by 1991. Five critical reasons explain why this process of deficit reduction must continue and why deficit reduction should be achieved primarily through spending restraint.

REASONS FOR DEFICIT REDUCTION

First, persistent large Federal deficits, except during periods of severe economic difficulty or extraordinary national need, constitute an unfair burden on future generations. The principle that "there is no free lunch" applies to lunches charged on Uncle Sam's credit card. In the end, all Federal spending must be paid for by some form of explicit or disguised taxation. Finance of current expenditures through the issuance of Federal debt merely postpones the inevitable day when the bill for current services (plus accumulated interest) must ultimately be paid, either through higher taxes or through reduced public services. More specifically, interest payments on the Federal debt must ultimately be financed by some combination of re-

Chart 2-1

Federal Outlays and Receipts as Percent of GNP



Note.—Data for 1987 are estimates.
Sources: Department of Commerce, Office of Management and Budget, and Council of Economic Advisers.

ducing the growth of noninterest Federal outlays below the growth of GNP or by higher future taxes relative to GNP. The longer large deficits persist, the larger grows the outstanding stock of Federal debt and hence the greater is the ultimate required adjustment in future noninterest outlays or taxes. Thus, the choice is not whether to reduce the budget deficit, but rather when and by what means.

Second, deficit reduction through spending restraint is essential to preserve the long-term economic benefits of the low marginal tax rates established in the Tax Reform Act of 1986. This chapter later analyzes the gains to national income and national welfare from tax reform. These long-run benefits will begin to emerge, however, only if marginal tax rates are lowered as promised in 1988, and only if individuals and businesses believe that these tax rates will not be increased in the future.

Third, persistent large Federal deficits throughout an economic expansion could pose a difficult dilemma for macroeconomic policy in the event of a significant economic downturn. In such a downturn, Federal receipts automatically decline and transfer payments expand.

Either a sharply contractionary fiscal policy would need to be adopted during a recession to prevent a further increase in the Federal deficit, or the share of the deficit in GNP would have to be allowed to expand to levels not previously experienced in the United States in peacetime. As is discussed in Chapter 1, there is no reason now to expect a recurrence of the economic difficulties that contributed to the steep recessions of 1974-75 and 1980-82. Nevertheless, it would be imprudent to permit the persistence of large Federal deficits throughout an economic expansion in light of the dilemma such deficits could create in the future.

Fourth, reduction of the Federal deficit through spending restraint is an essential component of the strategy to reduce international payments imbalances. Substantial progress has already been made on one component of this strategy—exchange-rate realignments that improve the international competitive positions of many U.S. industries and promise significant reductions in the U.S. trade deficit in 1987 and beyond. As is discussed in Chapter 3, however, reduction of the U.S. trade deficit and of the corresponding trade surpluses of other countries also requires that domestic demand in the United States grow more slowly than U.S. GNP and conversely for foreign countries. Simultaneously, the United States must improve its national saving/investment balance (private saving less the sum of private investment and the government deficit). Reduction of the Federal budget deficit through spending restraint is a key U.S. contribution to achieving these results in a manner consistent with sustainable, noninflationary growth of the world economy. Furthermore, as discussed in Chapter 1, significant reductions in the trade deficit increase the likelihood that resources that might otherwise be used to meet the demands arising from Federal purchases will shift rapidly to meet the demands of sectors producing exports and import substitutes.

Fifth, deficit reduction through spending restraint is required because Federal spending in many areas remains above levels necessary to provide essential Federal services on an efficient and cost-effective basis. Much has been accomplished during the past 6 years in cutting back inessential, ineffective, and inefficient Federal programs. Larger cutbacks can and should be made in a number of Federal programs that serve special interests but whose benefits to the American people do not justify the costs imposed on current or future taxpayers. Equally important, new spending initiatives should be limited to critical areas of national need in the realm of Federal responsibility.

Deficit reduction is ultimately an issue of priorities. The long-run benefits of stronger economic growth from the relatively low marginal tax rates provided in the Tax Reform Act of 1986 can be preserved only if the share of Federal spending in GNP is gradually reduced. Alternatively, Federal spending can be maintained and expanded on programs that serve a variety of special interests, at the expense of current and future consumption by American families and investment by American businesses. In making the politically difficult choices required for deficit reduction, however, damage to Federal programs that promote peace, maintain national security, or provide essential support to the poor and elderly is neither necessary nor desirable.

GROWTH OF THE FEDERAL BUDGET DEFICIT

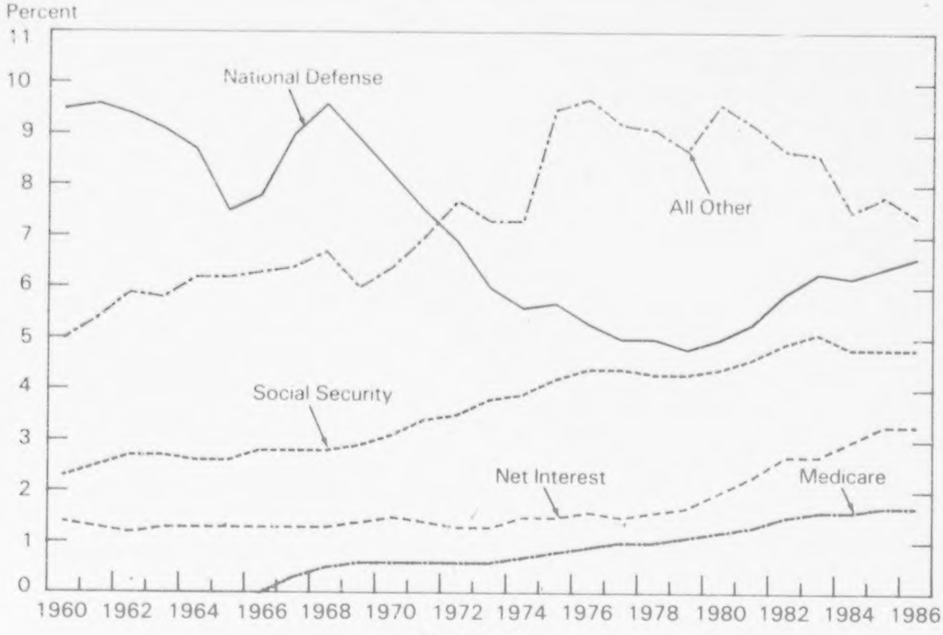
The tax rate reductions mandated by the Economic Recovery Tax Act of 1981 (ERTA) reduced the share of Federal receipts in GNP to the average of the 1960s and 1970s. In 1986, this share stood at 18.5 percent, virtually the same as in 1978 (also the fourth year of an economic expansion). Between 1978 and 1981, the share of Federal tax collections rose to a postwar high of 20.1 percent, primarily as the result of bracket creep. A significant contribution of ERTA was the indexation of tax brackets, standard deductions, and personal exemptions, effective in 1985, which ensured that future inflation could not once again push up the share of Federal revenues without an explicit and visible decision to raise tax rates.

On the spending side of the Federal budget, total spending growth has not been adequately restrained, but the distribution of Federal spending has changed in important respects. Between 1978 and 1986, Federal spending rose from 21.1 to 23.8 percent of GNP. The key changes in the distribution of Federal spending that occurred between 1978 and 1986 are illustrated in Chart 2-2 and may be summarized as follows:

- The share of defense spending increased from 4.8 percent of GNP to 6.6 percent, ending the long period of erosion of national defense capabilities.
- The share of social security benefits increased by 0.5 percent of GNP, maintaining a critical commitment to older and disabled Americans and their families.
- The share of medicare expenditures increased by 0.7 percent of GNP, reflecting both increased health care benefits and the partial success of efforts to limit the increasing cost of providing such benefits.
- The share of net interest payments increased by 1.7 percent of GNP, reflecting higher interest rates and the growing stock of Federal debt.
- The share of general nondefense programs (except social security, medicare, and net interest) declined by 1.8 percent of GNP.

Chart 2-2

Federal Outlays as Percent of GNP



Sources: Department of Commerce and Office of Management and Budget.

- Within the broad category of general domestic programs, funds were reallocated away from inefficient, ineffective, low-priority programs and toward programs serving important national needs. For example, funding for community and regional development was reduced substantially and general revenue sharing was eliminated, while outlays for health research and Federal law enforcement activities increased significantly.

Despite the substantial progress already achieved in reorienting budget priorities, important work remains to be done. Elimination or curtailment of inessential, inefficient, and ineffective Federal programs is required to contribute to reduction of the share of Federal spending in GNP and to allow room for expansion of programs that serve critical national needs.

PROSPECTS FOR DEFICIT REDUCTION

The Administration is committed to achieving the targets for deficit reduction prescribed by Gramm-Rudman-Hollings (GRH). The first important step in this process will be taken during the current fiscal year, with a reduction of the Federal deficit to almost $50 billion below its fiscal 1986 level. Meeting the GRH deficit targets for 1988 and later fiscal years will not be an easy task, even with the continuation of reasonably strong economic growth and with further moderation of inflation and interest rates. However, as the following analysis suggests, the task is achievable provided the economic climate remains favorable.

In fiscal 1986, Federal spending amounted to 23.8 percent of GNP, while Federal receipts absorbed 18.5 percent of GNP, leaving a deficit of 5.3 percent of GNP. Under the Administration's economic projections, continued economic growth and previously legislated increases in social security payroll taxes will increase the share of Federal receipts to 19.4 percent of GNP by 1991. These projections imply that spending restraint must reduce the share of Federal spending in GNP by 4.4 percent by 1991 to achieve a balanced budget without general tax rate increases.

The President is firmly committed to no reductions in social security retirement benefits. Fulfilling this commitment means that the share of social security expenditures will remain virtually unchanged at 4.5 percent of GNP. Reductions in the share of total Federal spending in GNP must come from other sources.

Net interest payments amounted to 3.3 percent of GNP in fiscal 1986. If the economy grows and interest rates decline as projected, and if growth in the outstanding stock of Federal debt is slowed by deficit reduction in accord with GRH targets, then net interest expense will decline by at least 1 percentage point of GNP by 1991. This process is the reverse of that through which a rapidly growing stock of Federal debt (fed by large Federal deficits) and rising interest rates contributed to the growth of net interest expense as a share of GNP. To reverse this process, however, it is absolutely essential to place the ratio of Federal debt to GNP on a descending path, mainly through progress in spending reduction in categories other than net interest expense. The sooner this task is accomplished, the easier will be the subsequent task of deficit reduction.

The projected reduction of 1 percent in the share of net interest expense and the relative constancy in the share of social security benefits imply that to reach a balanced Federal budget, the combined share of all other categories of Federal expenditure must decline from 15.7 percent of GNP in 1986 to roughly 12.5 percent in 1991. Total Federal spending in this broad composite amounted to $655 billion in fiscal 1986. If real spending in this composite remained constant at the 1986 level, projected economic growth between 1986 and 1991 would reduce its share in GNP from 15.7 to 13.3 percent. Thus, an absolute reduction of real spending in this composite of about $39 billion of 1986 dollars is required to achieve a balanced budget.

Cutting $39 billion or 6.0 percent from composite spending of $655 billion should not be an insurmountable task. The difficulty of this task is heightened, however, by the need to accommodate real spending increases in areas of critical national need and primary Federal responsibility. In particular, in the 1988 budget, the President has identified the following major areas as requiring increased expenditures: national defense, foreign affairs (including foreign aid and embassy protection), scientific and health research (including acquired immune deficiency syndrome research), drug abuse control and treatment, space exploration, and implementation of the new immigration law. Increasing expenditures in these critical areas will require deeper cuts in less essential Federal programs if the deficit reduction targets are to be met.

PROPOSALS FOR SPENDING REDUCTIONS

The Administration's proposals for program reductions and terminations are described in detail in the President's 1988 budget. A brief review of some of these proposals helps to place the economic issues associated with deficit reduction into proper perspective.

Spending on farm support programs has been the most rapidly growing major category of Federal spending, increasing from $4 billion in 1981 to $25.8 billion in 1986. The desire to assist farm families during a period of severe economic difficulty accounts for much of this increased spending. However, total farm support spending has now reached a level that would finance a direct payment of more than $16,000 annually to each of 1.6 million farm families, or an annual payment of more than $42,000 for each of the 619,000 commercial-sized farms in the United States. By comparison, median income for all U.S. families is less than $30,000. Moreover, most farmers receive little or no financial assistance from Federal farm price-support programs. Of the 34 percent of American farmers who did receive direct assistance in 1985, one-fifth received almost 70 percent of the payments. In the cotton program in 1986, 12 percent of the participants received more than one-half of the total payments, with some receiving millions of dollars. The 50 largest rice producers will each receive more than $1 million in 1986 payments.

As is discussed in Chapter 5, Federal farm support programs are not only expensive to the taxpayer and ineffective in channeling support to the most needy, but they also generate huge economic waste. Because current Federal programs link financial support to farm output, they encourage production of crops for which there is no effective market. Appropriate reform of farm support programs can reduce economic waste and lower Federal expenditures while maintaining income support for distressed farm families.

The Federal Government continues to subsidize activities for which the original rationale has disappeared or where no persuasive case for Federal involvement can be made in the first place. For example, mass transit systems can provide important benefits in the local areas where they operate, but generally no good rationale exists for Federal subsidies that distort local choices concerning the construction and operation of such systems. The Administration proposes elimination of discretionary grants for new mass transit systems.

Another example is the Rural Electrification Administration (REA), which has gone well beyond its original purpose of encouraging extension of electrical supply in rural areas. Since 1935, when the Agency was founded, farms receiving electric service through REA have increased from 12 percent of all farms to 99 percent. Rural telephone service (added as an REA responsibility in 1949) now extends to 95 percent of all farms. REA's original goals have been achieved, but it lives on, offering subsidized loans to electric cooperatives serving prosperous urban and suburban areas such as Atlanta, Georgia; Denver, Colorado; Manassas, Virginia; and Minneapolis, Minnesota. Loans have also been provided for electrification in exclusive resorts such as Aspen, Steamboat Springs, and Vail in Colorado, and Hilton Head Island, Kiawah Island, and Myrtle Beach in South Carolina. The Administration proposes to curtail these practices by imposing appropriate limits on REA lending and loan guarantees.

OTHER REVENUE MEASURES

The Administration's proposals for deficit reduction also involve increasing Federal revenues by levying equitable user fees for Federal services provided to identifiable beneficiaries, by selling some federally owned assets, and by instituting other relatively minor programs to generate revenues. Both user fees and asset sales serve the dual purpose of raising revenue for the Federal Government and encouraging economic efficiency. Efficiency in the use of services provided by the Federal Government that are similar to services provided by private business is encouraged when the user of the service, rather than the general taxpayer, pays the cost of providing the service. Economic efficiency is also often advanced when business-like operations are shifted from the Federal Government to the private sector, where the profit motive and force of competition promote efficiency.

Major Administration proposals concern increased user fees for guaranteed student loans and for home loans guaranteed by the Veterans Administration (VA) and the Federal Housing Administration (FHA), and for mortgage-backed securities guaranteed by the Government National Mortgage Association (GNMA). Costs associated with defaults on guaranteed student loans have run well ahead of revenues from current fees—a situation that should be corrected. The same is true for VA home loans. For FHA and GNMA, evidence suggests that their association with the government provides an implicit subsidy that allows them to charge less for their services than a private business would have to charge for the same service.

In addition to continuing sales from the Federal Government's loan portfolio, major proposals for asset sales include the sale of Amtrak and the phaseout of subsidies to Amtrak, sale of the Naval Petroleum Reserve, and sale of the Alaska Power Administration. Transfer of these programs to the private sector would lead to more efficient operation, as well as generating revenue.

Asset sales are a one-time source of revenue. Indeed, sales of loans from the Federal portfolio and sales of government enterprises that earn a profit increase current revenue at the expense of future revenue. Such asset sales effectively transfer part of the task of deficit reduction from the present to the future. If adequate progress is being made in attacking the core of the deficit problem, however, partial transfer of this problem into the future through asset sales may be desirable.

Once the budget is balanced on a cash basis, the nominal stock of Federal debt will not grow and the ratio of Federal debt to GNP will decline. As the ratio of Federal debt to GNP declines (assuming constant interest rates), the share of net interest expense in GNP will decline at a moderate pace. This development will allow room for other categories of Federal spending to rise, absolutely and as a share of GNP, without any increase in tax rates. Lost revenues from prior asset sales can be made up under these circumstances without absolute cuts in spending programs or tax rate increases. This strategy works, however, only if asset sales play a limited role in the total strategy of deficit reduction, as they do in the President's 1988 budget, and if the other elements of that strategy are pursued consistently and effectively.

BUDGET CONCEPTS AND FISCAL AUTHORITY

Gramm-Rudman-Hollings significantly alters the congressional budget process. It imposes targets for the Federal budget deficit in each of fiscal years 1986–91 as well as a timetable and procedures for meeting these targets. A number of other proposals have recently been made to reform the process by which budget decisions are deliberated and implemented as well as to change the coverage and content of the budget itself. Proposals to modify the coverage and content of the Federal budget are motivated by the concern that the current budget does not adequately reflect the economic costs of Federal credit programs or capital investments made by the government. The line-item veto and a balanced budget amendment to the Constitution are proposed reforms of the budget process that are motivated by the fact that, absent the temporary Gramm-Rudman-Hollings procedures that expire in 1991, congressional decisions to increase outlays are not directly related to decisions affecting expected tax receipts.

Federal Credit Programs

The accounting for Federal credit programs is a major weakness in the present budget. Currently, the budget costs of direct loan programs are measured by the net outlays of those programs, that is, total disbursements and interest paid minus repayments and interest received. Congressional appropriations for direct loan programs are generally only necessary when new disbursements exceed repayments. Loan guarantees do not result in recorded outlays except in case of default. A loan guarantee represents a contingent liability of the government that induces lenders to invest in particular loans, thus allocating capital for federally determined purposes. Thus, a loan guarantee may provide as large a subsidy as a direct loan obligation.

The budget neither measures nor controls the most salient aspect of Federal credit—the size of the subsidy offered the borrower. Without some means of measuring and controlling this subsidy, neither the executive branch nor Congress can make informed decisions about Federal credit programs, either by comparing one with the other or by comparing them with noncredit expenditure programs.

Some inadequacies of the budget treatment of Federal credit programs were rectified by introduction of the Federal credit budget in 1980. The Federal credit budget measures direct loan obligations and guaranteed loan commitments. Although it is a step forward, the credit budget does not restrain the total volume of Federal credit effectively. Only about 55 percent of the credit budget totals for 1985 were capped by appropriation act limitations. Moreover, the credit budget does not measure the subsidy costs, nor does it directly restrict the level of subsidy that a program offers the borrower.

The Administration proposes to change the budget treatment of direct loans and loan guarantees. Legislation for this purpose will be sent to the Congress in the spring of this year. The Administration's proposal would divide the face value of a new direct loan into two parts: the market value of the loan and the present value of Federal subsidies. A Federal Credit Revolving Fund would be established under the direction of the Treasury. Before an agency could make direct loans, Congress would have to appropriate funds to that agency for the provision of direct loan subsidies. As loans were made, the agency would provide the Fund with the information required to estimate the present value of the direct loan subsidies. The central revolving account would be charged for the market value, or nonsubsidized component, of direct loans. The agency would then be charged for the subsidy component of direct loans.

In the case of loan guarantees, Congress would first make appropriations to the agency. As the agency granted loan guarantees, it would provide the Fund with the information necessary to estimate the present value of the guarantee subsidies. The agency would be charged for the value of the subsidy and would also transmit to the Fund any fees paid by the borrowers. The Fund would then assume the contingent liability for the guarantees.

To establish an objective measure of direct loan subsidies, newly made direct loans would be sold to the public without recourse. Similarly, new loan guarantees would be reinsured with private insurers.

Adoption of the Administration's proposal would ensure that the budget reflected the true economic costs of Federal credit programs. It would provide the President and Congress with the information necessary to make informed decisions about the allocation of budget resources to these programs.

A Capital Budget

The Federal budget is a comprehensive statement of expected cash outlays and cash receipts. The budget includes both operating and investment outlays, but does not report separate operating and capital budget subtotals. However, details of Federal investment outlays are presented in a special analysis that is published with the budget. The comprehensive outlay and receipt totals are indispensable for evaluating the effect of Federal policies on the level and composition of aggregate economic activity. The unified budget deficit, which is the difference between total Federal outlays and receipts, figures prominently in macroeconomic analysis precisely because it measures the government's demand for private domestic and foreign saving as well as the change in the outstanding stock of government debt.

For many years, proposals have been made to separate the unified Federal budget into an operating budget and a capital budget. Although the proposals differ in important respects, all share the essential feature that Federal receipts and outlays would be disaggregated into their operating and capital components. In general, investment outlays would not be charged against operating receipts in the calculation of the operating deficit, and only the subsidy component of direct loans and loan guarantees would be considered an operating outlay. Investment expenditures and the market value of direct loans would constitute the outlays used in calculating the capital budget deficit.

Several arguments have been made in favor of a capital budget. First, it would provide the information and incentives necessary to promote economically efficient government capital planning. Second, borrowing to finance capital outlays would spread the cost of government investments more equitably among current and future beneficiaries and thus link the payment for a government investment with its use. For this reason, it has been argued that operating and capital budget subtotals should be calculated separately so as to distinguish between Federal borrowing that finances current operations from borrowing that finances capital investments yielding future benefits.

Opponents argue that the capital budget would not promote economically efficient capital planning. Because capital outlays would not be deducted from receipts in the calculation of the operating deficit, the constraint on capital outlays might be relaxed to such an extent that budget decisions would be biased in favor of capital spending. Furthermore, technical disagreement over the definition of capital outlays would likely occur, such as whether expenditures for research and development or education should be included in the capital budget and thus not be charged against receipts in calculating the operating budget deficit. More generally, opponents argue that a unified budget is needed to hold public officials accountable for appropriations of tax receipts. Separate capital and operating budgets would, according to this view, invite manipulation to hide and expand Federal spending.

It is important that the long-term benefits of government capital investments be adequately assessed against the current budget cost of the resulting capital outlays. However, it is at least equally critical that budget deliberations take into account the effect of proposed policies on total outlays, receipts, and the unified budget deficit.

The Line-Item Veto

The line-item veto would authorize the President to veto individual line items in appropriation bills, subject to the current provisions for overriding a veto of any bill. Governors in 43 States now have such authority. Congress has approved such authority for the Governors of the Commonwealth of Puerto Rico and the Trust Territories and for the Mayor of the District of Columbia—but not for the President.

For more than a century, Congress has rejected Presidential requests for this authority in order to maintain the opportunity to package spending proposals that the President would otherwise veto in broader appropriations that the President would approve. Appropriations are presented to the President in only 13 general appropriation bills. Indeed, last year Congress did not pass a single one of the 13 appropriation bills, but instead passed one 389-page omnibus spending bill. Because Congress had not completed action on the annual appropriation bills, the President was compelled by law to shut down the Federal Government. Such abrogation of a responsible budget process by Congress not only discourages careful, prudent legislation—it encourages excessive spending and waste.

Effective use of the line-item veto would change the composition and level of Federal expenditure. A Member of Congress is elected by voters in a specific congressional district or State, while the President is elected by the voters of the Nation. As a consequence, a Member of Congress has stronger preferences for programs and projects that benefit his or her regional constituency, especially because only a fraction of the cost of such programs and projects are borne by his or her constituency. The expected result of granting approval for a line-item veto would be a decrease in expenditures on programs and projects whose regional benefits do not exceed the cost to the Nation's taxpayers. This result should be a sufficient basis for early approval of Presidential authority for a line-item veto.

Balanced Budget Amendment

The President has endorsed the concept of a balanced budget/tax limitation amendment to the Constitution. The objective is to change the rules by which decisions are made to borrow or to increase the size of Federal outlays and receipts relative to national income. Although several amendments have been proposed, two that have been considered in the Senate share the following provisions:

- A requirement that total outlays be no greater than total receipts, unless three-fifths of the whole number of both Houses of Congress decide otherwise in a vote devoted solely to that subject;
- A prohibition on increases in the public debt, absent approval by three-fifths of the whole number of both Houses of Congress;
- A requirement that all or some revenue-increasing bills be enacted by a majority of the whole number of both Houses of Congress by roll call vote; and
- The authority for Congress to waive these requirements in the event of war.

Approval of this proposed amendment would be a recognition that each generation may need to bind itself to responsible fiscal decisions in the interests of the current and future American community.

The line-item veto and a balanced budget amendment cannot substitute for the hard choices necessary to restrain the growth of Federal expenditure and to reduce the Federal deficit. Early approval of these proposals, however, could force a resolution of the choices necessary to resolve major near-term fiscal issues.

TAX REFORM

This section assesses the economic effects of the Tax Reform Act of 1986. The purpose of this assessment is twofold: to forecast the effects that tax reform will have on future macroeconomic activity and, by demonstrating the substantial benefits of tax reform, to guard against possible future changes in the tax code that would undo the important progress that has been made.

OVERVIEW

The Tax Reform Act of 1986 fundamentally alters the structure of the Federal income tax. It broadens the personal and corporate income tax bases and substantially lowers tax rates. These changes will significantly alter private incentives and, accordingly, will influence the economy's performance through three principal channels:

- Lower marginal tax rates on personal income, in conjunction with a broader tax base, will increase labor effort and reduce the exploitation of tax loopholes.
- More uniform tax rates on income from alternative capital investments will induce a more efficient allocation of investment funds.
- A somewhat higher overall marginal tax rate on capital income will modestly reduce the economy's long-run capital intensity.

The analysis in this section indicates that tax reform will significantly improve the economy's long-run performance. This improvement will come from several sources, most of which have not been explicitly quantified. Estimates that have been made, however, suggest that the Nation's output of goods and services will permanently increase by approximately 2 percent because of the long-run consequences of tax reform.

This section begins with a discussion of the conditions leading to tax reform and a brief explanation of the importance of marginal tax rates for economic efficiency. The chapter then turns to an assessment of the Tax Reform Act of 1986 (TRA). This assessment begins with a description of the major provisions of TRA and an analysis of their microeconomic implications. Finally, the chapter explores the implications of TRA for long-run economic growth and short-run macroeconomic activity.

THE CONDITIONS LEADING TO TAX REFORM

Despite legislated "tax reductions" during the 1960s and 1970s, marginal tax rates rose substantially as inflation pushed taxpayers into higher tax brackets. As is shown in Table 2-1, a family of four with median earnings in 1965 paid 17 cents in tax on the last dollar of income earned. Such a family, therefore, had a marginal tax rate of 17 percent. The marginal tax rate for a similar family in 1980, in contrast, had risen to 24 percent due to bracket creep. The growth in marginal tax rates was more dramatic at higher incomes: a family with twice the median income in 1980 had a marginal tax rate almost double that of a similar family in 1965.

TABLE 2-1.—*Marginal personal income tax rates for four-person families, selected years, 1965-88*[1]

[Percent]

Year	Family income		
	One-half median income	Median income	Twice median income
1965	14	17	22
1970	15	20	26
1975	17	22	32
1980	18	24	43
1986	14	22	38
1988 (TRA)	15	15	28

[1] Excludes social security taxes and State and local income taxes.

Source: Department of the Treasury, Office of Tax Analysis.

For income from capital gains, inflation not only increases the statutory rate of tax because of bracket creep, but it also causes the effective tax rate to exceed the statutory tax rate. This phenomenon was particularly important in the 1970s, when inflation rates were high. In 1979, for example, a 1-year investment yielding a 10 percent nominal capital gain yielded, after 9 percent inflation, a 1 percent real capital gain. Federal taxes, however, are levied on nominal capital gains. A taxpayer in the 70 percent tax bracket who received a 10 percent nominal capital gain, therefore, earned a 7.2 percent nominal after-tax return (taking the 60 percent capital gains exclusion into account). After 9 percent inflation, this translates to a minus 1.8 percent real after-tax return. Hence, for this hypothetical investor, inflation increased the effective tax rate on the 1 percent real pretax capital gain from 28 percent to 280 percent. This phenomenon is entirely independent of bracket creep and, for the taxation of capital gains, is quantitatively much more important.

Inflation also distorts the taxation of corporate bond interest. The nominal rate of return on bonds includes an inflation premium that is not distinguished, for tax purposes, from the real return. Corporations can deduct nominal bond interest paid from their taxable income and individual bondholders must include nominal bond interest received in their taxable income. Inflation, therefore, decreases (increases) the effective rate of tax on debt-financed corporate investment if the corporate tax rate exceeds (is less than) the marginal tax rate of the marginal bondholder. Because of the offsetting effects of the corporate and personal tax systems, inflation affects the taxation of real corporate bond interest much less than it does the taxation of real capital gains.

The high inflation rates of the 1970s distorted the taxation of capital income in still another way. Deductions for the depreciation of a capital asset, which are properly subtracted from gross capital income to determine taxable income, are set in accordance with the purchase price of the asset. Inflation therefore reduces the real value of depreciation deductions. This phenomenon, in addition to the taxation of inflationary capital gains, caused the effective rate of tax on equity-financed investments to rise substantially during the 1970s.

It became increasingly apparent in the late 1970s that these inflation-induced increases in effective tax rates were stifling private incentives to work and to save and were impeding economic growth. To restore private production incentives, therefore, the Administration proposed, and Congress passed, the Economic Recovery Tax Act of 1981. ERTA called for a phased reduction in personal tax rates that, when completed in 1984, substantially reduced personal marginal tax rates (see the 1986 tax rates in Table 2–1). The top marginal tax rate was reduced from 70 to 50 percent. ERTA also extended eligibility for individual retirement accounts (IRAs) to individuals with other pension plans. Beginning in 1985, the rate schedule, the zero bracket amount, and the personal exemption were indexed to the price level. ERTA also included substantial investment incentives. Although these incentives were scaled back somewhat by TEFRA, the Tax Equity and Fiscal Responsibility Act of 1982, ERTA and TEFRA together significantly lowered the effective tax rate on income from most capital investments.

ERTA-TEFRA substantially reduced marginal tax rates but left two particularly undesirable features of the income tax. First, ERTA-TEFRA's investment incentives increased the opportunities for tax avoidance. Second, ERTA-TEFRA did not help to equalize marginal tax rates on alternative capital investments. In particular, investments in corporate equipment retained their tax advantages over investments in corporate structures. Uneven tax rates on income from alternative capital investments result in a misallocation of capital and a lower value of output than would otherwise be obtainable.

To correct these problems and others, and to reduce marginal tax rates further, the President submitted to Congress detailed proposals for income tax reform in May 1985. These proposals became the basis for congressional deliberations that culminated in TRA. This law differs somewhat from the President's proposals but retains their overall thrust. TRA lowers marginal tax rates, broadens the personal and corporate tax bases, and helps to equalize marginal tax rates on alternative income-producing activities.

MARGINAL TAX RATES AND ECONOMIC EFFICIENCY

Marginal tax rates—the rates paid on the last dollar earned from income-producing activities—influence the incentives to engage in productive activities and, hence, are extremely important elements of the tax system. The marginal tax on labor income, for example, drives a tax wedge between the value of output that an additional unit of labor produces and the after-tax wage received by workers, thereby discouraging additional labor effort. A reform of the tax system that lowers the marginal tax rate on labor income, while raising the same total revenue, therefore increases labor effort and economic well-being. Economic well-being is increased because the value of total output is increased by more than the total value of leisure is decreased. Likewise, the marginal tax on investment income drives a tax wedge between the pretax return to investment and the after-tax return to saving. Additional saving that would be induced by a lower marginal tax rate on capital income increases the total value of output by more than it increases the inconvenience cost of postponing consumption.

A uniform tax on investment income distorts the overall savings decision. A nonuniform tax on capital income introduces an additional distortion in the allocation of saving and investment. Because investment funds tend to be directed toward assets with the highest expected after-tax returns and because the return to a particular asset type declines with its quantity, alternative investments tend, in equilibrium, to yield equal after-tax returns. Hence, the pretax return on a particular investment tends to be higher, the higher is the effective marginal tax rate. Unequal marginal tax rates on alternative capital investments, therefore, result in an output loss. That is, the value of output would be increased if investment funds were shifted away from investments with low marginal tax rates and low pretax returns, and toward investments with high marginal tax rates and high pretax returns. The greater are the differentials among marginal tax rates on alternative capital investments, the greater is the resulting output loss.

High marginal tax rates on labor income also encourage excessive consumption of untaxed employee fringe benefits. A worker with a 30-percent marginal tax rate, for example, gives up 70 cents in take-home pay for each dollar of (untaxed) fringe benefits he or she receives. The worker, or the worker's union, therefore rationally seeks an amount of fringe benefits that have a value, at the margin, equal to only 70 percent of their true cost.

More generally, high marginal tax rates increase incentives to engage in tax avoidance and evasion. Tax avoidance occurs when taxpayers make legitimate investment or consumption choices that are influenced by the desire to reduce tax liabilities. As was demonstrated for the case of untaxed employee fringe benefits, tax avoidance leads to an inefficient allocation of resources and is apt to increase with the marginal tax rate on ordinary income. Tax evasion, conversely, is the failure to comply with the tax laws. The incentive to hide income from the tax authorities, so as to evade taxes, increases with the marginal tax rate. Tax evasion, like tax avoidance, ordinarily results in wasteful expenditures of time, energy, and tangible resources.

A MICROECONOMIC ANALYSIS OF THE TAX REFORM ACT

The Personal Income Tax

TRA significantly lowers tax rates on personal income. When the law is fully effective in 1988, two tax brackets, set at 15 and 28 percent, will replace the 14 that ranged from 11 to 50 percent. The 15-percent bracket and the personal exemption are phased out for high-income returns, which results in an implicit 33-percent tax rate for a broad income range. As is shown in Table 2–1, TRA reduces marginal tax rates to levels that are similar to those that prevailed in 1965.

These rate reductions are made possible, in part, by TRA's base-broadening measures. TRA broadens the personal tax base, or taxable personal income, to include the following: all long-term capital gains, State and local sales taxes, IRA contributions for high-income individuals with employer-provided pension plans, nonmortgage consumer interest payments, miscellaneous itemized deductions less than 2 percent of adjusted gross income, net losses from passive investments, and net losses from active real estate investments for high-income taxpayers. These base-broadening measures are partially offset by substantial increases in the standard deduction and personal exemption. By 1988, the personal exemption is nearly doubled and the standard deduction is increased 36 percent for joint returns and 21 percent for single returns.

An important feature of TRA is its strong limitations on tax-sheltered activities, which have grown greatly over the past several years. Two factors are largely responsible for the recent growth in tax shelters; first, the high inflation rates of the late 1970s and early 1980s increased the real value of nominal interest deductions on leveraged investments, and second, ERTA-TEFRA substantially accelerated depreciation deductions. These factors increased the opportunities for claiming early losses in exchange for later capital gains that have the advantages of tax deferral and a lower tax rate.

TRA limits tax shelters directly and indirectly. The elimination of the capital gains preference, the deceleration of tax depreciation deductions, more stringent limitations on investment interest deductions, and the lowering of marginal tax rates all serve indirectly to make tax shelters less attractive. Moreover, any remaining tax avoidance opportunities are subjected to TRA's provisions concerning passive business losses and real estate losses. In particular, net losses from passive business investments and real estate investments for high-income taxpayers cannot be deducted from ordinary income; they must be carried forward and deducted from net income from like activities in later years.

These tax-shelter limitations not only make the personal income tax more equitable, but they should also result in more economically efficient investment decisions. Investments that previously provided opportunities for tax avoidance are put on a more equal footing with other investments. Investment funds, therefore, should have a greater tendency to flow to their most highly valued uses.

The elimination of the nonmortgage consumer interest deduction should also improve the current allocation of investment funds. Consumer durables yield a flow of services that, unlike alternative investments yielding monetary income, is untaxed. By disallowing nonmortgage consumer interest deductions, TRA partially eliminates the tax preference that is currently afforded to consumer durables. TRA, therefore, puts consumer durables on a more equal footing with alternative investments and should lead to more efficient investment decisions.

Allowing State and local taxes to be deducted from the Federal income tax base is both inefficient and inequitable. It is inefficient because it reduces the perceived cost of State and local government services and, except possibly in cases where State spending generates appreciable spillover benefits, encourages excessive State and local spending. It is inequitable because it causes residents of low-tax localities, who enjoy relatively small amounts of State and local government services, to pay a disproportionate share of Federal taxes. TRA ameliorates these problems in two ways: it disallows the State and local sales tax deduction, and, by lowering the marginal Federal tax rate, it lowers the value of other State and local tax deductions.

TRA disallows IRA deductions for high-income individuals with employer-provided pension plans. However, TRA still allows most working individuals to deposit $2,000 (nondeductible) each year in IRAs and defer tax on accrued interest until the funds are withdrawn at retirement. This tax advantage is substantial, accounting for a large portion of the tax savings afforded by deductible IRAs.

Although TRA significantly limits itemized deductions, it substantially raises the standard deduction. As a result, TRA is estimated to reduce the number of itemized personal Federal income tax returns in 1988 by 11.5 million, thereby yielding an approximate $1.3 billion reduction in compliance costs.

Equity. TRA will cut total personal income taxes by about 6.6 percent in 1988. Table 2-2 gives the percentage tax cut for eight income classes. The estimates are based on an expanded definition of income that equals adjusted gross income plus such items as excluded capital gains, passive business losses, and tax-exempt bond interest.

TABLE 2-2.—*Effects of the Tax Reform Act of 1986 on Federal tax liabilities and average Federal tax rates, by income class, 1988*

Income class (1986 dollars)[1]	Percent change in income tax liability	Average tax rate (percent)	
		Prereform	TRA
0 to 10,000	−56.2	2.0	0.9
10,000 to 15,000	−27.8	5.4	3.9
15,000 to 20,000	−14.8	7.0	6.0
20,000 to 30,000	−8.5	8.9	8.1
30,000 to 50,000	−7.1	11.0	10.3
50,000 to 100,000	−.9	13.9	13.7
100,000 to 200,000	−1.0	17.4	17.1
200,000 and over	−.9	13.6	13.4
ALL INCOME CLASSES	−6.6	10.3	9.6

[1] The income concept (modified expanded income) is one of many possible income classifiers and was used by the Joint Committee on Taxation to present the distributional effects of the Tax Reform Act of 1986. An alternative measure, "economic income," was used in the Treasury Department's *The President's Tax Proposals* in 1985.

Note.—Distributions reflect most but not all of the provisions of the individual income tax code.

Source: Department of the Treasury, Office of Tax Analysis.

The percentage tax cut under TRA is largest for low-income returns. The number of poor families paying Federal income tax is estimated to fall by 4.3 million in 1988 under TRA. With one small exception, the estimated percentage tax cut under TRA steadily falls for higher income returns. Thus, these estimates indicate that TRA actually increases the effective progressivity of the personal Federal income tax despite a less graduated rate structure. This result is shown in the last two columns of Table 2-2, which give the estimated average tax rate for each income class under TRA and the prereform tax law. TRA cuts the average tax rate much more for taxpayers with income less than $50,000 than it does for higher income taxpayers.

Table 2-2 concerns only personal Federal income taxes. Because all taxes are ultimately paid by individuals, a complete analysis of tax incidence would allocate undistributed corporate income and Federal corporate taxes to the various income classes. Exactly how this should be done, however, is uncertain. Current evidence is not conclusive, but it suggests that part of the corporate tax burden is borne by workers and that the majority is borne by owners of capital. If this inference is correct, it would imply that high-income taxpayers, who earn a disproportionate share of capital income, bear a relatively large share of the corporate tax burden. Because TRA shifts 6.6 percent of the individual income tax burden to corporations, it would follow that a proper imputation of corporate taxes to the various income classes would probably reinforce the conclusion that TRA enhances the effective progressivity of the Federal income tax.

TRA increases the long-run horizontal equity of the Federal income tax. Horizontal equity concerns the degree to which taxpayers with equal amounts of economic income have equal tax liabilities. Because of TRA's limitations on tax preferences, including the elimination of the capital gains preference, the limitations on tax shelters, and a stricter minimum tax, it substantially reduces the variation in the amount of tax paid by taxpayers with the same real income.

As does any significant reform of the tax system, TRA will cause a one-time change in asset values that will redistribute wealth. Existing assets that received tax preference under ERTA-TEFRA and have their tax preferences curtailed under TRA suffer capital losses. Contrariwise, any existing assets that are taxed less heavily under TRA than they were under ERTA-TEFRA enjoy capital gains. Special transition rules make these changes in asset values less severe in some cases. The deductions for passive business losses and real estate losses attributable to assets acquired prior to tax reform, for example, are phased out gradually over 4 years. The same is true for deductions of interest payments on preexisting nonmortgage loans.

This phenomenon of changing asset values is one reason why changes in the tax law should be infrequent and implemented only for compelling reasons. Investments tend to be inherently risky; further riskiness introduced by frequent changes in the tax law unnecessarily destabilizes the business environment.

Business Taxes

The proper measurement of economic income from investments in real assets requires that deductions be made for the decline in real asset values attributable to depreciation. Since 1954, tax law has allowed investors to deduct for more rapid depreciation on most assets than actually occurs. Accelerating depreciation in this manner lowers the cost of capital, which is defined as the minimum pretax investment return that is profitable. The cost of capital has also been reduced by the investment tax credit, which applied primarily to equipment assets and allowed investors to deduct a percentage of an asset's purchase price immediately from tax liabilities.

TRA repeals the investment tax credit, allows less accelerated depreciation, and lowers the corporate tax rate from 46 to 34 percent. These provisions taken together have two general effects: they tend to raise the cost of capital overall, and they tend to equalize the cost of capital for alternative capital investments. The latter effect is due primarily to more equal effective rates of tax on investments in corporate equipment and corporate structures.

Table 2-3 gives the estimated percent change in the cost of capital brought about by TRA for three sectors of the economy and for various assets within the corporate sector. For the corporate sector, the calculations take into account corporate, property, and personal taxes. Investments are taxed differently depending on whether they are financed with debt or equity. Table 2-3 gives results for three different modes of finance; for debt, equity, and a combination of debt and equity.

TABLE 2-3.—*Percent change in cost of capital under the Tax Reform Act of 1986*

Sector	Financing mode				
	Debt	Equity		Debt and equity	
		Old view[1]	New view[1]	Old view[1]	New view[1]
Corporate sector	48.6	−4.8	4.7	2.8	11.9
Equipment	197.3	26.6	43.7	43.7	62.2
Nonresidential structures	44.5	1.0	10.6	7.7	16.6
Public utilities	47.9	6.5	16.2	13.3	22.2
Residential structures	24.2	−5.7	2.1	−.4	6.5
Inventories	21.1	−18.6	−11.0	−13.0	−5.8
Nonresidential land	19.3	−18.0	−10.6	−12.5	−5.5
Residential land	16.5	−17.0	−9.9	−11.6	−5.1
Noncorporate business sector	4.7	.6	.6	1.9	1.9
Owner-occupied housing	3.3	1.6	1.6	2.2	2.2
Total business	22.1	−2.8	3.0	2.4	7.4
TOTAL	16.8	−2.1	2.7	2.3	6.2

[1] See text for explanation of the old view and the new view of dividend taxation.

Note.—Changes are relative to the prereform tax law. The computations take into account corporate taxes, property taxes, and personal taxes at all levels of government.

Source: Department of the Treasury, Office of Tax Analysis.

As is shown in the first column of the table, TRA substantially increases the cost of debt-financed capital investments. This result follows largely because the value of interest deductions falls with the fall in corporate and personal tax rates.

There are currently two views in the economics profession concerning the relative importance of taxes on capital gains and on dividends for determining the cost of equity capital. The "new view" of dividend taxation maintains that taxes on capital gains are very important, while taxes on dividends are nearly irrelevant, for determining the cost of equity capital. The "old view" of dividend taxation, conversely, maintains that taxes on dividends, as well as taxes on capital gains, are important for the cost of equity capital. It follows that TRA, which raises the marginal tax rate on capital gains and lowers the marginal tax rate on dividends, increases the cost of capital more under the new view of dividend taxation than under the old view. No consensus has formed as to which of these two views is correct. Although the new view gained wide acceptance when first introduced, recent empirical evidence does not uniformly support either view over the other.

The estimates in Table 2-3 indicate that the overall cost of equity-financed investment falls under the old view and rises under the new view. The cost of corporate equipment rises much more than the cost of corporate structures. This finding also applies to the noncorporate sector and is attributable to the repeal of the investment tax credit. Because TRA reduces corporate and personal tax rates, the cost of capital falls dramatically for nondepreciable capital assets, such as inventories and land.

Historically, approximately one-third of investment is financed with debt and two-thirds with equity. The last two columns of Table 2-3 use these weights to obtain overall percentage changes in the cost of capital for both views of dividend taxation. These calculations indicate that the overall cost of capital rises by 2.3 to 6.2 percent. Because debt finance becomes relatively more expensive under TRA, and the financing shares are not allowed to respond to this change, these estimates tend to overstate the rise in the cost of capital. On the other hand, these estimates do not incorporate tax-shelter limitations or changes in accounting rules, provisions of TRA that raise the cost of capital.

TRA substantially evens the cost of capital across assets within each sector. This effect is shown in the first part of Table 2-4, which concerns the variation in the cost of capital within the corporate sector. For every asset, TRA is estimated to reduce the magnitude of the percentage deviation of the cost of capital from the overall average cost of capital in the corporate sector. Because relative costs of capital within each sector depend primarily on the investment tax credit and depreciation allowances, and these features of the tax law are the same for the corporate and the noncorporate sectors, these conclusions also apply to the noncorporate sector.

However, TRA does not alleviate the intersectoral distortions in the capital income tax, as is shown in the second part of Table 2-4. The corporate sector is taxed most heavily, followed, in order, by the noncorporate sector and owner-occupied housing.

TABLE 2-4.—*Within-sector and between-sector variation in the cost of capital*

Sector	Old view[1]		New view[1]	
	Prereform	TRA	Prereform	TRA
	Percent deviation from average corporate cost of capital			
Corporate sector:				
Equipment	−34.9	−8.9	−37.2	−8.9
Nonresidential structures	−6.9	−2.5	−6.3	−2.3
Public utilities	−8.8	.5	−7.6	.9
Residential structures	21.9	18.1	24.8	18.8
Inventories	21.4	2.7	21.5	2.4
Nonresidential land	26.0	7.4	27.0	7.3
Residential land	35.4	16.5	37.9	17.0
	Percent deviation from overall average cost of capital			
Corporate sector	16.3	16.8	7.2	12.9
Noncorporate business sector	−5.9	−6.2	.5	−3.6
Owner-occupied housing	−17.6	−17.7	−12.0	−15.3

[1] See text for explanation of the old view and new view of dividend taxation.

Note.—Assumes financing is one-third debt and two-thirds equity.

Source: Department of the Treasury, Office of Tax Analysis.

A recent study indicates that eliminating the uneven taxation of assets within sectors, and retaining the intersectoral distortions, would cause investment funds to be reallocated so as to increase real net national product—real GNP less capital depreciation—permanently by about 0.2 percent. Because TRA reduces the within-sector variance in the cost of capital by about 60 percent, this finding suggests that this particular feature of TRA will, after a period of adjustment, permanently increase net national product by about 0.1 percent.

This estimate of the neutrality gains under TRA omits two important factors. First, the cost-of-capital estimates do not take into account the possible "churning" of assets. Churning occurs when a used asset is sold and redepreciated, for tax purposes, by the new owner. Under ERTA-TEFRA, this investment strategy was viable only for assets that have an active resale market, most particularly commercial structures and rental housing. TRA's limitations on tax shelters substantially reduce the tax preference afforded to such assets. Therefore, the quantified neutrality gains under TRA are mismeasured to the extent that TRA's neutrality gains associated with churnable structures are different than TRA's neutrality gains associated with other structures. Second, TRA increases the relative tax preference given to intangible assets, such as expenditures on marketing, advertising, and research and development. This result follows from the fact that TRA increases the overall cost of tangible capital, and income from intangible capital assets is entirely untaxed (at the margin) at the corporate level under both ERTA-TEFRA and TRA.

Because intangible assets are not included in the cost of capital computations, the quantified neutrality gains from TRA tend to be overstated.

Under both TRA and the prereform tax law, corporations are able to deduct interest payments. Because dividend payments are not deductible, equity finance is put at a disadvantage relative to bond finance, which presumably encourages corporate borrowing. The estimates of the cost of capital indicate that TRA reduces the tax advantage of financing corporate investments with debt rather than equity by about 25 percent. TRA, therefore, should reduce the incentive for corporate borrowing, thereby reducing bankruptcy costs and other economic costs attributable to the issuance of corporate debt.

Under TRA as well as the prereform tax law, inflationary returns to capital investments are taxed. Also, depreciation allowances are not indexed for inflation. The cost-of-capital estimates in Tables 2–3 and 2–4 assume that the inflation rate is 3 percent. If the inflation rate should rise, the cost of capital would increase. Table 2–5 gives the percentage change in the cost of capital under TRA caused by a 5-percentage-point increase in the inflation rate. The overall cost of capital rises 3.2 percent under the new view of dividend taxation and 5.1 percent under the old view. Higher inflation would also exacerbate the tax-induced distortion in the choice of debt and equity finance. Inflation must be kept low, therefore, to maintain appropriate investment and financing incentives.

TABLE 2–5.—*The cost of capital under the Tax Reform Act of 1986 for an 8-percent inflation rate: Percent change from case of 3- percent inflation*

Financing mode	Percent change
Debt	−13.8
Equity:	
Old view[1]	12.0
New view[1]	9.5
Debt and equity:	
Old view[1]	5.1
New view[1]	3.2

[1] See text for explanation of the old view and the new view of dividend taxation.

Source: Department of the Treasury, Office of Tax Analysis.

TRA'S EFFECT ON LONG-RUN ECONOMIC GROWTH

It has been argued that TRA will lead to more efficient consumption and investment decisions and, for fixed aggregate quantities of productive inputs, will lead to an increase in output and economic well-being. This section analyzes TRA's effects on the long-run supplies of capital and labor and the implications for economic growth and economic well-being. This section abstracts from issues concerning the composition of the capital stock and of output, topics that were discussed in earlier sections.

Table 2-6 gives the marginal tax rate (averaged over taxpayers) for all levels of government on labor income, capital income, and output under TRA and the prereform tax law. So as to estimate conservatively the long-run gains under TRA, the effective marginal tax rate on capital income assumes that the new view of dividend taxation applies. The average marginal tax rate on labor income takes account of the social security and medicare payroll taxes. In so doing, the linkage between these payroll taxes and future benefits is assumed to be sufficiently weak and uncertain that these payments are regarded as taxes. As is shown in the table, TRA lowers the marginal tax rate on labor and raises it on capital. The marginal tax rate on output, which is a weighted average of the marginal tax rates on labor and capital, falls 4.3 percent under TRA.

TABLE 2-6.—*Average marginal tax rates on labor income, capital income, and output*

Item	Prereform	TRA
Labor income	41.6	38.0
Federal income tax	25.8	21.7
State and local income and sales tax [1]	4.9	5.4
Social security and medicare payroll tax [2]	10.9	10.9
Capital income [3]	34.5	38.4
Output [4]	39.8	38.1

[1] Rate is the statutory tax rate (measured as State and local income and sales taxes divided by net national product in 1985) adjusted down in accordance with the deductibility of State and local taxes (except sales taxes under TRA) from the Federal income tax base.

[2] Social security and medicare payroll tax rate, for both employees and employers, multiplied by the portion of total labor income earned by individuals who are subject to the payroll tax at the margin.

[3] Includes taxes at all levels of government.

[4] Tax rate on labor income multiplied by labor's share of income (0.75) plus the tax rate on capital income multiplied by capital's share of income (0.25).

Sources: Department of the Treasury (Office of Tax Analysis) and Council of Economic Advisers.

The immediate effect of TRA will be to raise the net wage by 6.2 percent and lower the net return to saving by 5.9 percent. These changes will increase labor effort and depress saving as a portion of an enlarged pool of labor income. Relative to their baseline growth paths, therefore, labor input will increase and capital input may increase or decrease. Capital input is more likely to increase the more labor compensation, and hence total income, increases. In any case, the ratio of capital to labor is decreased.

The long-run economic effect of TRA is most appropriately measured in terms of real net national product. The effect of TRA on net national product depends on its effects on capital and labor input. Net national product is more likely to rise the more labor supply responds to the after-tax wage, and the less the supply of savings responds to the after-tax return to capital. The change in economic welfare, or individual well-being, depends on changes in consumption and leisure. Because changes in net national product and consumption may come at the expense of less leisure, net national product is an imperfect measure of economic welfare.

These factors have been analyzed in the context of a formal model of economic growth. The assumptions of the model, among them that population and productivity grow at constant rates, are extremely simple. None of the assumptions, however, is expected to lead to biased results. That is, no a priori reason exists to believe that plausible alternative assumptions would yield qualitatively different conclusions. The model therefore gives useful guidance, but the precision of its estimates should not be overstated.

Table 2-7 summarizes the results of this analysis. The point estimates of TRA's long-run effects are given in the first column of the table. Relative to their baseline growth paths, it is estimated that real net national product rises 2.2 percent, aggregate consumption rises 3.6 percent, capital input falls 0.4 percent, and labor input rises 3.1 percent. Because the value of consumption is raised more than the value of leisure is decreased, economic welfare is increased. In fact, TRA is estimated to increase individual well-being by as much as would an annual distribution, from an outside source, equal to 1.2 percent of net national product.

TABLE 2-7.—*The long-run simulated effect of the Tax Reform Act of 1986*[1]

Item	Point estimate[2]	Plausible range[3]
Percent change in:		
Net national product	2.2	0.4 - 2.9
Consumption	3.6	1.5 - 4.3
Capital input	-.4	-4.6 - 1.3
Labor input	3.1	2.0 - 3.8
Net capital return	-2.6	-3.4 - -.6
Net wage	4.9	4.2 - 5.2
Annual welfare change as percent of net national product	1.2	.4 - 1.9

[1] The simulation model is adapted from Lawrence H. Summers, "Capital Taxation and Accumulation in a Life Cycle Growth Model," *American Economic Review*, September 1981. The Summers model is extended to allow for endogenous labor supply and an unfunded social security system.

[2] Elasticity of substitution in production (ESP) = 0.75. Elasticity of intertemporal substitution (EIS) = 0.20. The uncompensated elasticity of labor supply is zero for all cases.

[3] ESP varies between 0.5 and 1.0 and EIS varies between 0.05 and 1.0

Source: Council of Economic Advisers.

The point estimates incorporate assumptions about production technology and behavior that, while consistent with the existing empirical literature, are subject to error. The second column of Table 2-7 gives ranges for the long-run changes under TRA that correspond to alternative plausible assumptions. All plausible assumptions lead to the conclusion that TRA increases economic welfare, net national product, and consumption.

An important factor that has been omitted in this analysis is TRA's effect on productivity growth. The returns to education come, in large part, through higher future wages. Because TRA decreases the marginal tax rate on labor income, the incentive to invest in education and other forms of human capital is increased. Hence, TRA should lead to more human capital investment and consequently to higher levels of productivity and output growth.

Also, the model underlying the long-run simulations assumes a closed economy with no trade. The tax rates reported in Table 2–6, however, reflect on TRA's effect on U.S. production costs relative to those of other countries. The average marginal tax rate on output in the United States is estimated to decline by 4.3 percent under TRA. Hence, while TRA may cause the composition of U.S. exports to shift toward labor-intensive goods and away from capital-intensive goods, it should not adversely affect the overall U.S. current account trade balance for given exchange rates and given after-tax returns to U.S. factors of production.

THE SHORT-RUN MACROECONOMIC EFFECTS OF TRA

Although TRA will increase long-run economic growth, it may cause some short-run adjustment problems. First, TRA will slow the growth of investment to a modest extent as the capital stock adjusts to its new long-run equilibrium growth path. Hence, unless consumption or net exports takes up the slack, aggregate demand growth will be dampened somewhat. Second, TRA will cause a reallocation of investment that, in the short run, will cause some industries to grow less rapidly. Other industries, of course, will grow more rapidly under TRA, but possibly with a short lag.

Aggregate Investment

The long-run simulation results illustrate the relationship between investment and changes in the long-run equilibrium capital stock. If the point estimates given in Table 2–7 are correct, TRA will induce a 0.4 percent decline in the long-run capital stock relative to its baseline growth path. This result would imply that net and gross investment also fall 0.4 percent in long-run equilibrium. In the transition to the long-run equilibrium, however, net investment would fall an additional amount equal to 0.4 percent of the current capital stock, or a total of about $50 billion. Assuming a short 5-year adjustment period, this result would imply that TRA will cause gross investment to fall by less than 2 percent from baseline in each of the next 5 years. After this initial period of adjustment, however, TRA should have a minimal effect on investment.

This method of estimating TRA's effect on short-term investment encounters two problems. First, it assumes that the economy is currently on the long-run equilibrium growth path associated with the substantial investment incentives included in ERTA-TEFRA. Recent estimates, however, suggest that only about one-half of the additional desired capital accumulation induced by ERTA-TEFRA has been completed. This finding implies that Table 2–7 overestimates the percentage decline in the long-run capital stock. Second, the simulation results give a broad range for the probable change in the long-run capital stock. In fact, a relatively small change in assumptions raises the implied decline in the long-run capital stock from 0.4 to 1.0 percent. However, the conclusions regarding changes in economic welfare and net national product are robust with respect to alternative assumptions.

An alternative upper-bound estimate of TRA's effect on investment is suggested by the observation that the equilibrium capital stock path under TRA is significantly above that which would have prevailed under the 1980 tax law, prior to ERTA. This conclusion follows from estimates indicating that, relative to the 1980 tax law, TRA results in a similar cost of capital (the cost of equity capital, however, is much lower under TRA) and a substantially lower cost of labor. The resulting higher supply of labor under TRA, relative to what would have prevailed under the 1980 tax law, will simultaneously increase the demand for investment and the supply of savings. It follows that TRA only partially scales back the investment incentives included in ERTA-TEFRA. An extreme upper-bound estimate of the fall in the equilibrium capital stock under TRA, therefore, is the net addition to the capital stock that has been induced by ERTA-TEFRA over the past 6 years.

A recent econometric study concludes that ERTA-TEFRA's business tax cuts increased gross nonresidential fixed investment by about $28 billion in the first 2 years of the current economic expansion. Extrapolating this result to each of the past 6 years, and assuming the same proportionate effect on multifamily housing investment, leads to the conclusion that ERTA-TEFRA's business tax cuts increased gross investment by about $90 billion over the past 6 years. After adjustment for depreciation, this change in gross investment implies a $64 billion increase in the capital stock. TRA, therefore, will cause the equilibrium capital stock to decline, relative to baseline, by much less than $64 billion. Assuming a short 5-year adjustment period, the implied upper-bound reduction in annual gross investment from baseline over the next 5 years is less than 2 percent. An investment decline of this magnitude amounts to only 0.3 percent of GNP.

Investment in 1987 will be influenced by two additional factors. Because the corporate tax rate is 40 percent in 1987 and 34 percent thereafter, an incentive exists to shift investment from 1988 to 1987 so that the first year's depreciation allowances are written off against the higher 1987 tax rate. On the other hand, some investment that would have been made in 1987 may have been shifted to 1986 to take advantage of more accelerated depreciation allowances.

It is important not to confuse the short-run effects of TRA with its long-run effects. In the long run, investment will be little affected by TRA and, because of an increased labor supply and more efficient investment decisions, output and economic welfare will increase.

Transition Costs

A major advantage of TRA is that it evens effective marginal tax rates on alternative capital investments, thereby improving the economy's long-run allocative efficiency. Unfortunately, this evening of tax rates entails short-run transition costs.

TRA will cause investment to shift away from assets that enjoyed favorable tax treatment under ERTA-TEFRA. This shifting will directly affect producers of capital inputs. Construction, in particular, will be adversely affected because the new tax rules will limit the ability of individuals to deduct net losses on investments in commercial structures and rental housing in exchange for later capital gains. These provisions of TRA have probably contributed to the recent slowdown in the construction industry. New nonresidential construction expenditures were unchanged between 1985 and 1986 after having risen at a 7-percent annual rate between 1982 and 1985. Likewise, multifamily housing starts in 1986 were down 12 percent from the pace of 1985.

TRA may also induce a minor restructuring of the market for final goods and services. The general increase in business taxes under TRA does not significantly affect the relative cost of capital for the various producers of final goods and services, but it will raise the relative cost of capital-intensive goods and services. The mix of goods and services, therefore, will shift toward more labor-intensive goods. The magnitude of this change, however, will be small. The overall cost of capital rises less than 7 percent, which sets an upper limit on the increase in the price of one industry's output relative to another.

SUMMARY

TRA will lead to substantial long-run increases in economic welfare. Relative to net national product, the approximate changes in economic welfare that have been quantified are 0.1 percent for a more efficient allocation of investment funds and 1.2 percent for changing long-run factor supplies. Additional welfare gains, which have not been quantified, will result from greater levels of human capital investment; from less tax bias toward corporate debt; from less excessive consumption of employee fringe benefits, consumer durables, and State and local government services; and from less tax evasion.

TRA will increase the long-run fairness of the income tax. All income classes receive a personal income tax cut and the percentage tax cut tends to be largest for low-income taxpayers. TRA also severely limits the opportunities for tax avoidance and will tend to equalize effective tax rates within income classes.

TRA will inflict some short-run costs on the economy as resources are reallocated to more highly valued uses. However, these transition costs will be minor relative to the permanent long-run gains.

CONCLUSION

The Tax Reform Act of 1986 is perhaps the most important reform of the Federal income tax since its inception in 1913. TRA restores incentives to work, save, and invest, and will substantially boost economic growth and individual well-being.

Important progress has recently been made in restraining the growth in Federal spending. More must be done. It is imperative that the Federal budget deficit be brought under control in accord with the provisions of Gramm-Rudman-Hollings. To preserve the gains of tax reform, and to free more resources for use in the private sector, deficit reduction should be accomplished primarily through additional spending restraint. This task will be difficult but it can be achieved without sacrificing essential government services. The effort could be aided by appropriate reforms of the budgetary process.

CHAPTER 3

Growth, Competitiveness, and the Trade Deficit

THE DETERIORATION OF THE U.S. TRADE BALANCE has been a disturbing feature of the current recovery. From a surplus equivalent to almost 1 percent of real gross national product (GNP) in 1982, U.S. real net exports of goods and services declined sharply to a deficit equivalent to more than 4 percent of real GNP in 1986, far larger than the deficit recorded in any postwar year before 1984. The growing U.S. trade deficit is often cited as a principal cause of the slowdown of real GNP growth since mid-1984 and of the problems of many trade-sensitive industries. This chapter assesses the causes and effects of the growing U.S. trade deficit and discusses policies adopted by the United States and other countries that will gradually reduce international trade imbalances in a manner consistent with sustainable growth in the world economy.

The increase in the U.S. trade deficit is a macroeconomic phenomenon. Imports have grown strongly and exports have stagnated primarily because of the strong growth of the U.S. economy (especially in terms of demand growth) relative to other countries, the difficulties faced by many developing countries in managing their external debts, and the fall in U.S. price competitiveness associated with the large appreciation of the dollar between 1980 and early 1985. Underlying these developments are several macroeconomic imbalances, including the deterioration in the U.S. saving-investment balance that has resulted from the failure of the Federal Government to bring its expenditures in line with revenues.

Initially, the deterioration of the U.S. trade balance was associated with developments that had favorable effects for the U.S. economy (reduced inflation because of dollar appreciation and reduced upward pressure on interest rates because of a capital inflow). It certainly had favorable effects for the rest of the world, which was suffering from sluggish economic growth. More recently, however, large trade and payments imbalances have been recognized to pose substantial problems for the world economy, including the stimulation of protectionist sentiments.

Important policy actions have been taken in the United States and other countries to reduce international trade and payments imbalances. Better convergence of performance and policies and efforts at policy coordination have brought about exchange-rate adjustments that improve the price competitiveness of U.S. industries. However, there is a lag in the effect of exchange-rate adjustments on trade flows.

Further efforts are needed to reduce current payments imbalances. The United States must press forward in reducing the Federal fiscal deficit through restraint on the growth of Federal spending. At the same time, other industrial countries must undertake policies that will strengthen internally generated economic growth. Developing countries need to adopt growth-oriented strategies for resolving their economic difficulties. The overall strategy is to reduce international imbalances in a manner consistent with sustainable economic growth, in the United States, in other industrial countries, and in the developing countries, rather than by moving toward protectionism that would injure all countries.

THE MACROECONOMIC CHARACTER OF THE U.S. PAYMENTS POSITION

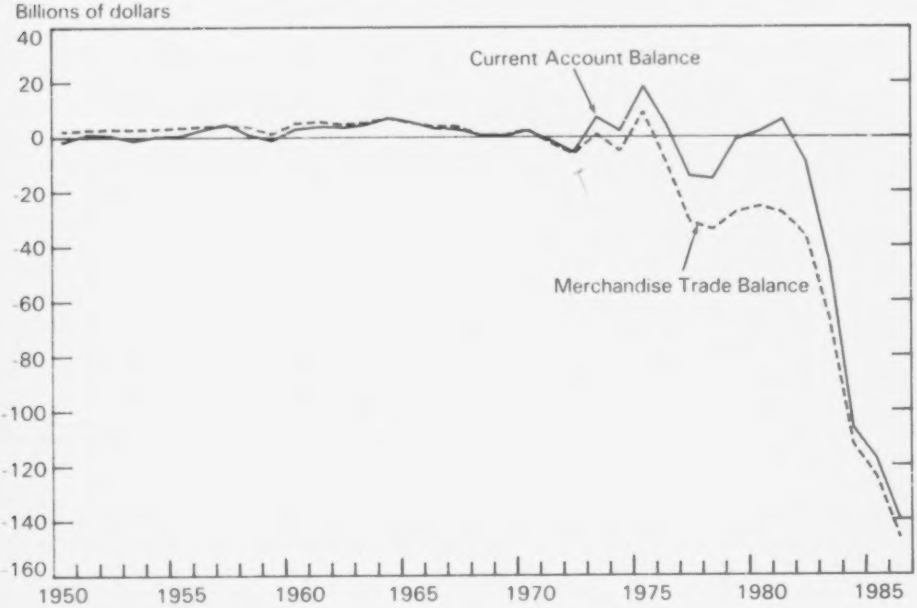
By any measure, the United States has experienced an unprecedented deterioration in its international payments position. The U.S. current account deficit—i.e., the excess of imports of goods and services over exports, plus net transfers made to foreign residents—widened from $9 billion in 1982 to an estimated $145 billion in 1986 (Chart 3-1). Almost all of this change is attributable to the increase in the merchandise trade deficit, which rose to an estimated record $150 billion in 1986.

The deterioration of the U.S. trade balance has been across-the-board. Between 1982 and 1986, the U.S. merchandise trade balance (census basis) worsened in 9 of the 10 major product groups used to classify trade, including such disparate sectors as chemicals, food and live animals, and machinery and transport equipment. Among these major product groups, the U.S. merchandise trade balance improved only in the mineral fuels and lubricants sector. This exception, however, has clearly resulted from special factors, the most important being the decline in oil imports following the 1979-80 oil shock and the recent drop in petroleum prices.

Similarly, deteriorations in U.S. bilateral trade balances have been widespread. Between 1982 and 1986, the U.S. bilateral trade position worsened against all of the top 10 U.S. trading partners (based on total trade) and 19 of the top 20. The widening of the U.S. bilateral

Chart 3-1

U.S. Trade and Current Account Balances



Note.—Data for 1986 are first 3 quarters at an annual rate; seasonally adjusted.
Source: Department of Commerce.

trade deficit with Japan from $19 billion in 1982 to more than $55 billion in 1986 has attracted the most public attention, but this deterioration is not unique. The change in the U.S. bilateral trade balance with Western Europe has been about as large, falling from a surplus of $5 billion to a deficit of more than $30 billion. Substantial deteriorations in U.S. bilateral trade positions have also been recorded with Latin America and the newly industrializing countries of East Asia, in each case exceeding $10 billion.

Special factors have undoubtedly influenced bilateral trading patterns and some markets are more open to U.S. exports than others. It is not correct, however, to place primary blame for the more than $100 billion increase in the U.S. trade deficit over the past 4 years on unfair trading practices by U.S. trading partners. The deterioration of the U.S. trade balance is too pervasive to be credibly explained by analyses focused on a product-by-product, country-by-country, basis. Rather, the great bulk of the widespread deterioration must be viewed as a product of general macroeconomic developments in the United States and the rest of the world.

This point is demonstrated by recent developments in U.S. trade in manufactures. Between 1982 and 1985, the U.S. deficit in manufactures trade widened by $101 billion. Imports of manufactures increased $112 billion. This increase in manufactures imports has been a focus for protectionist pressures in the United States, especially regarding Japan. However, as shown by Table 3–1, most of the change in U.S. bilateral balances in manufactures trade during this period reflects general movements in imports and exports, not country-specific changes in bilateral trading relations. Although the U.S. balance of manufactures trade with Western Europe deteriorated by $21 billion between 1982 and 1985, Western Europe provided virtually the same percentage of total U.S. imports of manufactures and absorbed the same percentage of total U.S. exports of manufactures in both periods. Japan supplied a somewhat higher share of U.S. imports of manufactures in 1985 than in 1982. This increase in market share, however, accounts only for about one-sixth of the $32-billion increase in Japanese exports of manufactures to the United States during this period. At the same time, the share of total U.S. exports going to Japan increased. Clearly, general movements in U.S. imports and exports, not changes in bilateral trade relations, represent the proper focus for understanding the deterioration of the U.S. international payments position.

TABLE 3–1.—*U.S. trade in manufactures, 1982 and 1985*

Country/Area	Change in bilateral balances, 1982 to 1985 (billions of dollars)	Percent share in			
		U.S. imports		U.S. exports	
		1982	1985	1982	1985
Canada	−4.6	20.1	18.8	19.8	26.2
Japan	−29.8	25.1	26.6	6.6	7.6
Western Europe	−21.1	26.0	26.1	26.7	26.7
Latin America	−10.4	6.1	6.2	12.2	12.9
East Asian NICs[1]	−16.4	14.6	15.0	7.0	7.2

[1] Newly industrializing countries: Hong Kong, Singapore, South Korea, and Taiwan.

Source: Department of Commerce, Bureau of the Census.

The general movements in U.S. imports and exports are summarized in Table 3–2. Growth of U.S. spending on imports, while strong, has not been especially rapid given the growth of the U.S. economy. Imports of goods and services (on a national income and product accounts basis) rose from 10.6 percent of nominal GNP in 1982 to 11.4 percent in 1986. Non-oil imports grew more rapidly, but this was partly offset by a decline in the oil import bill. This "normal" growth of import expenditures, however, masks a substantial increase in import volumes. Import prices have fallen sharply relative to other goods (most recently due to falling petroleum prices) and real imports rose 55 percent between 1982 and 1986. Real exports, however, grew less than 3 percent during this period even though real export prices have fallen significantly. This absence of export growth, combined with continued import spending and rapid growth of import volumes, accounts for the deterioration of the U.S. trade balance.

TABLE 3-2.—*U.S. Exports and imports of goods and services, 1980–86*

Year	As percent of GNP				Relative prices (1982=100)[1]	
	Current dollars		1982 dollars		Exports	Imports
	Exports	Imports	Exports	Imports		
1980	12.8	11.7	12.2	10.4	105.3	112.0
1981	12.5	11.4	12.1	10.6	103.7	108.1
1982	11.4	10.6	11.4	10.6	100.0	100.0
1983	10.4	10.5	10.6	11.2	97.5	93.7
1984	10.2	11.7	10.6	13.0	95.9	90.3
1985	9.2	11.2	10.1	13.1	91.6	85.6
1986[2]	8.9	11.4	10.1	14.2	87.7	80.3

[1] Implicit price deflator for exports or imports relative to GNP implicit price deflator.
[2] Preliminary.
Source: Department of Commerce, Bureau of Economic Analysis.

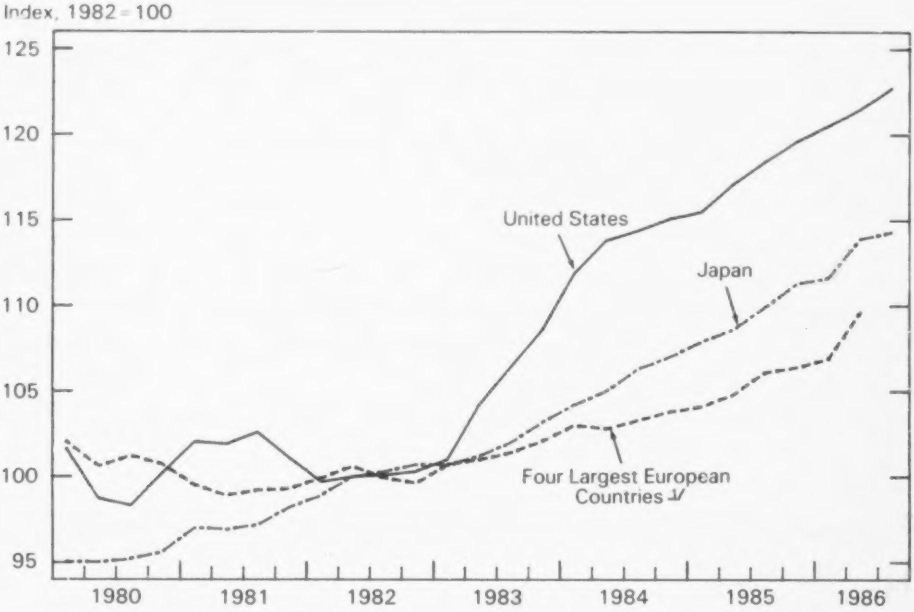
In summary, the deterioration of the U.S. trade balance over the past 4 years is a macroeconomic phenomenon. The trade balance has deteriorated against virtually all major trading partners and in virtually all major product categories. This deterioration has been associated with a stagnation in the growth of U.S. exports, strong growth of U.S. imports in volume terms, but only about normal growth of domestic spending on imports. The fundamental explanation of these developments is to be found in the relatively strong performance of the U.S. economy during the current expansion, in the factors that underlie the deterioration of the U.S. national savings-investment balance, and in the forces that generated the strong appreciation of the U.S. dollar and the associated loss of competitiveness of U.S. tradable goods industries during the early 1980s.

ECONOMIC GROWTH AND THE TRADE DEFICIT

A striking feature of the current expansion—and certainly one of the key factors in assessing world economic performance—is that the United States has enjoyed a strong expansion while the recovery of economic activity in most foreign countries has been weak. This difference in growth has been especially marked in total national spending, known as domestic demand. As indicated in Chart 3-2, total domestic demand grew much more rapidly in the United States than in other countries during the first six quarters of the expansion (through mid-1984). Since then, differentials between U.S. and foreign demand growth have narrowed considerably, but a large cumulative gap in domestic demand growth remains. This gap reflects the fact that the current recovery of U.S. domestic demand is one of the strongest of the postwar period. It also reflects the fact, however, that the recovery of domestic demand abroad has been one of the weakest.

Chart 3-2

Real Domestic Demand in Selected Industrial Countries



1/France, Italy, United Kingdom, and West Germany, weighted by GNP.

Note.—Domestic demand is the sum of personal consumption expenditures, gross private domestic investment, and government purchases of goods and services.

Sources: Department of Commerce and country sources.

These differences in output and demand growth have contributed to the deterioration of the U.S. international payments position in several ways. At an accounting level, the U.S. deficit on goods and services trade signifies that total expenditures on goods and services in the United States (domestic demand) exceed U.S. production of goods and services (GNP), and that the United States is importing the difference. Intuitively, the strong U.S. recovery—especially in terms of domestic demand—has boosted expenditures on imports as well as on domestically produced goods. Relatively weak growth abroad, however, has limited the expansion of U.S. export markets.

Weak foreign growth has been a critical problem for the world economy. Assessments of the U.S. recovery and the deterioration of the U.S. payments position must take account of this weakness and of the importance of the U.S. expansion to sustaining world growth. Similarly, domestic demand growth abroad needs to be assessed not only in terms of its effect on the U.S. trade balance, but also in its role in sustaining foreign growth as the U.S. economy adjusts. This section, therefore, reviews the recent economic performance of foreign industrial countries, developing countries, and the United States, and analyzes the deterioration of the U.S. trade balance in this regard.

FOREIGN INDUSTRIAL COUNTRIES

In the 1980s, the industrial countries faced critical economic challenges of reducing inflation rates generally from double-digit levels, adjusting to the second oil shock of 1979–80, recovering from the world recession, and halting or reversing the growth in government expenditures. All countries achieved substantial reductions in inflation, but experienced varying success in meeting other challenges.

Western Europe's recovery from world recession has been slack. Between 1982 and 1985, real GNP in Western Europe grew at an average annual rate of about 2.2 percent, one-half of the growth rate experienced in the United States, Canada, or Japan (Table 3–3). Annual growth of domestic demand was slightly weaker, averaging only about 1.8 percent. This slow growth has coexisted with rising unemployment during much of the recovery. In 1986, the average unemployment rate for the four largest European countries (France, Italy, the United Kingdom, and West Germany) was about 10 percent, roughly double its 1980 rate.

This slow growth is especially disappointing given the stimulus to world growth provided by the strong U.S. recovery and the appreciation of the dollar (which increased these countries' relative competitiveness). Most Western European countries, however, generally coped successfully with the depreciation of the dollar in 1986. The rapid passthrough of lower petroleum prices increased consumer incomes and both consumption and investment strengthened. This strengthening of domestic demand enabled many Western European countries to enjoy a slight acceleration of GNP growth despite a weakening of real net exports. The cumulative growth rate of Western European domestic demand over the course of the expansion, however, remains low, especially for West Germany (despite strong growth in 1986), where the level of domestic demand in 1985 was only slightly above its 1980 level.

TABLE 3-3.—*Growth in real domestic demand and real GNP in major industrial countries, 1970–86*

[Average annual percent change]

Country	1970 to 1980		1980 to 1985		1982 to 1985		1985 III to 1986 III	
	Real domestic demand[1]	Real GNP[2]	Real domestic demand[1]	Real GNP[2]	Real domestic demand[1]	Real GNP[2]	Real domestic demand[1]	Real GNP[2]
United States	2.5	2.8	3.4	2.4	5.6	4.2	3.6	2.3
Canada	4.9	4.6	2.1	2.5	4.2	4.2	3.3	3.5
Japan	4.2	4.7	2.8	3.9	3.1	4.3	3.8	2.3
France	3.7	3.6	1.2	1.2	.8	1.2	(3)	(3)
Germany	2.7	2.7	.2	1.3	1.9	2.4	3.6	2.3
Italy	2.9	3.1	.4	.9	1.5	1.7	4.5	3.0
United Kingdom	1.7	1.9	1.9	1.9	3.1	3.1	3.3	2.0

[1] Domestic demand is the sum of personal consumption expenditures, gross private domestic investment, and government purchases of goods and services.

[2] Data for Canada, France, Italy, and United Kingdom are real GDP.

[3] Not available.

Sources: International Monetary Fund and country sources.

Unlike Western Europe, Japan grew at a 4.3 percent annual rate between 1982 and 1985. Much of this growth, however, was export-led. Following the 1979 oil shock, domestic demand in Japan slowed markedly as the country adjusted to the higher oil import bill. During the first half of the 1980s, the average rate of domestic demand growth was only about one-half its 1970–79 average. Rising exports, however, enabled GNP to grow more than 1 percentage point higher than domestic demand. This excess of output over demand growth was reversed in 1986 as real Japanese exports fell in the wake of the sharp appreciation of the yen. Japanese internal demand increased somewhat, but not enough to offset the decline in exports, and Japan's rate of GNP growth slowed to under 3 percent.

Despite differences in their growth rates, Western Europe and Japan shared similar policies and challenges. They both faced the sudden increase in petroleum prices while shifting to anti-inflationary monetary policies. They both moved generally toward fairly austere fiscal policies by restraining government expenditures. While the resulting reduction in inflation and increased budgetary room for tax cuts should provide a good foundation for stronger growth in the long run, the initial effect of these developments was to depress economic activity.

In Western Europe, these developments interacted with structural rigidities that, in addition to reducing long-run growth, intensified and prolonged the effect of macroeconomic shocks. Substantial non-wage labor costs and excessively expensive job security arrangements discouraged labor mobility and new hiring. High marginal tax rates, various regulatory burdens, and large subsidies to declining industries and to agriculture impeded adjustment and growth by retarding the flow of investment toward high-growth sectors.

In Japan, structural rigidities did not prevent the economy from growing strongly over much of the 1980s. They did, however, hold domestic demand below what it could have been, giving the economy a bias toward export-led growth. Restrictions that have prevented the efficient use of scarce land, combined with mortgage instruments that require substantial downpayments, have made housing less affordable. Limitations on consumer credit markets have dampened the demand for consumer durables, discouraging investment aimed at producing for local markets.

DEVELOPING COUNTRIES

Slack growth of output and demand during the 1980s has not been confined to foreign industrial countries. With the exception of developing countries in Asia, growth in the developing world has been particularly weak. Between 1980 and 1986, annual real GNP growth in Latin America averaged 1 percent, less than one-fifth the average growth rate enjoyed during the 1970s (Table 3-4). Real GNP grew equally slowly in Africa over this period; in the Middle East, real GNP declined. This slow growth has depressed U.S. exports. Developing countries are important trading partners for the United States. In 1981, developing countries purchased 41 percent of all U.S. merchandise exports. By 1985, however, their trade share had fallen to 34 percent.

TABLE 3-4.—*Real GNP growth in developing countries*

[Average annual percent change]

Region	1970 to 1980	1980 to 1986[1]	1980 to 1983	1983 to 1986[1]
Western Hemisphere	5.8	1.0	−1.1	3.2
Africa	3.7	1.0	.3	1.7
Middle East	6.4	−.4	−.6	−.1
Asia	5.2	4.7	5.2	4.1

[1] Preliminary estimates.

Source: International Monetary Fund.

The slow growth of many developing countries is the product of many forces. The recession in the industrial countries in the early 1980s, followed by the slack recovery of domestic demand in Japan and Europe, reduced the demand for many exports by developing countries. Exporters of primary commodities suffered particularly, as the shift from the inflation of the 1970s to the disinflation of the

1980s, combined with sluggish world growth, depressed prices for these products. Since 1980, the dollar price of raw agricultural commodities has fallen 20 percent; mineral prices have declined 30 percent.

With the appreciation of the dollar, the real burden of the dollar-denominated debt of many developing countries increased considerably. Much of this debt was contracted at floating rates, making debt-service payments highly sensitive to the sharp rise in nominal and real interest rates in the early 1980s. These developments caused many lenders to doubt the capacity of several developing countries to meet their obligations, and to end abruptly the access of these countries to international capital markets.

The policies of many developing countries were an important cause of the interruption of voluntary lending flows. Overvalued exchange rates, price controls, and schemes to boost real wages by legislative fiat made the production of many goods unprofitable and reduced the international competitiveness of many developing countries. Maintenance of substantially negative real interest rates, as well as tax and regulatory policies that discouraged investment, induced capital flight instead of encouraging the inward flows of capital needed to promote more rapid development. Reliance on inefficient public enterprises to produce a wide variety of goods and services continued to be important drains on government budgets. These drains further increased external deficits in these countries while failing to engender the productive investment needed to increase their capacity to service the associated external debts.

Whatever the cause, the cessation of voluntary lending flows forced developing countries with debt-management problems to cut import spending rapidly in order to reduce their borrowing needs. Between 1981 and 1983, the value of U.S. merchandise exports to Mexico fell $9 billion, a drop of almost 50 percent. Exports to the rest of Latin America fell nearly 37 percent, or about $8 billion. In contrast, U.S. exports to industrial countries fell 10 percent. Since 1983, exports to Latin America have recovered somewhat but still remain below 1980 levels.

GROWTH AND THE TRADE DEFICIT

The strong recovery in the United States—and the resulting deterioration of the U.S. international payments position—was a powerful stimulant to growth in both industrial and developing countries. This growth, which took place against the background of world recession, provided a vibrant market for foreign exporters at a time when many developing countries, suddenly facing credit constraints, needed to expand exports to finance imports sufficient to maintain politically *acceptable levels of output and income. In contrast,* sluggish growth in most other industrial countries limited increases in their imports. Between 1982 and 1984, the United States absorbed about 95 percent of the increase in merchandise exports by Latin American countries to industrial countries, much more than would be implied by the normal 50 percent U.S. share of Latin American exports to industrial countries.

At first, the deterioration of the U.S. payments position helped as well as hurt the U.S. economy. During the first six quarters of the expansion, real GNP grew at a healthy 6.8 percent annual rate; domestic demand grew even faster, averaging 8.8 percent. In effect, growing net imports allowed desired increases in spending to be satisfied without pushing production growth to levels that would have caused bottlenecks. Although the strong appreciation of the dollar reduced U.S. international competitiveness, the resulting decline in import prices boosted real incomes in the United States and helped to ameliorate inflationary pressures.

Since mid-1984, domestic demand has grown at a 3.1 percent annual rate. However, despite this slowing of demand growth to more sustainable levels, increases in imports continued to outpace exports, and the annual rate of real GNP growth from the second quarter of 1984 to the fourth quarter of 1986 averaged only 2.4 percent. Insofar as the expanding capacity of the U.S. economy was more than sufficient to meet increases in total U.S. demand, the expansion of the U.S. trade deficit during this period was an important factor limiting growth. This negative consequence has stimulated protectionist sentiment in the United States, especially because the burden of the resulting adjustment has not been spread evenly through the economy. Industries that account for about 70 percent of U.S. GNP produce either services that do not enter into international trade or products that are largely nontradable. The deterioration in the U.S. balance in goods and services trade between 1980 and 1986, amounting to 5.7 percent of real GNP, was therefore concentrated in sectors of the economy that account for only about 30 percent of GNP. Moreover, the distribution of the adjustment within these sectors was not even.

THE SAVING-INVESTMENT BALANCE

The deterioration of the U.S. international payments position has also been closely associated with movements in national saving and investment. As discussed in the previous section, the U.S. deficit in goods and services trade signifies that total spending in the United

States on goods and services exceeds U.S. production of goods and services. This necessarily implies that the United States is absorbing foreign saving to finance the difference between expenditures and income or, equivalently, that U.S. investment exceeds U.S. saving. For example, in 1986, gross national saving in the United States was $537 billion; gross private investment was $686 billion. The difference was financed by a net capital inflow of nearly $150 billion from abroad.

THE PRIVATE SAVING-INVESTMENT BALANCE

The national saving-investment balance is the excess of the private saving investment balance—the difference between gross private saving and gross private domestic investment—over the general (Federal, State, and local) government deficit. Between 1982 and 1986, the private saving-investment balance fell from 3.5 percent of GNP to −0.1 percent. This decline reflected the strength of consumption and investment growth, as is normal for a recovery. Given the length of the current expansion, the current level of the private saving-investment balance is not unusually low. The private saving-investment balance was lower in 1969 and 1979 than it was in 1986.

Between 1982 and 1985, the gross private saving rate—defined as gross private saving divided by GNP—fell less than one-half percentage point (Table 3-5). The ratio of private saving to GNP fell significantly, but this decline was more than offset by increases in net business saving. Such offsetting movements in household and business saving are not surprising, since households are the ultimate owners of all wealth, including the capital owned by businesses.

TABLE 3-5.—*Private saving and investment*

Year	As percent of GNP					Relative price of investment (1982=100)[3]
	Private saving			Gross private domestic investment		
	Gross[1]	Personal	Business (net)[2]	1982 dollars	Current dollars	
1979	17.8	4.7	2.5	18.0	18.1	100.6
1980	17.5	5.0	1.4	16.0	16.0	100.1
1981	18.0	5.2	1.4	16.8	16.9	100.6
1982	17.6	4.9	.6	14.1	14.1	100.0
1983	17.4	3.8	1.9	15.4	14.7	96.0
1984	17.9	4.5	2.4	18.7	17.6	94.1
1985	17.2	3.6	2.7	18.1	16.5	91.8
1986[4]	16.2	2.8	2.8	17.9	16.3	90.9

[1] Gross private saving is personal saving plus net business saving and capital consumption.
[2] Net business saving is undistributed corporate profits plus inventory valuation and capital consumption adjustments.
[3] Implicit price deflator for gross private domestic investment relative to GNP implicit price deflator.
[4] Preliminary.

Source: Department of Commerce (Bureau of Economic Analysis) and Council of Economic Advisers.

The gross private saving rate fell sharply in 1986. However, even with the drop in private saving, most of the decline in the private saving-investment balance during the current expansion is accounted for by strong investment growth. Real gross private domestic investment rose 46 percent between 1982 and 1984, boosting the share of real investment in real GNP from a near record low of 14.1 percent to a near record high of 18.7 percent. Although investment growth has been sluggish since 1984, the share of real investment in real GNP has remained near cyclical highs.

This strength in real investment spending, however, was partially offset by a substantial decline in the relative price of investment goods. As reported in Table 3-5, the relative price of investment goods fell 9.1 percent between 1982 and 1986. In 1986, nominal expenditures on gross private domestic investment accounted for 16.3 percent of GNP, well below 1978-79 levels and only 0.3 percentage point above the average share of nominal investment expenditures experienced over the past 25 years. Thus, the lower relative price of investment goods allowed large increases in real investment to occur with only moderate demands on nominal saving. This development produced a normal cyclical decline in the private saving-investment balance, despite the decline in the gross private saving rate and the strength of real investment.

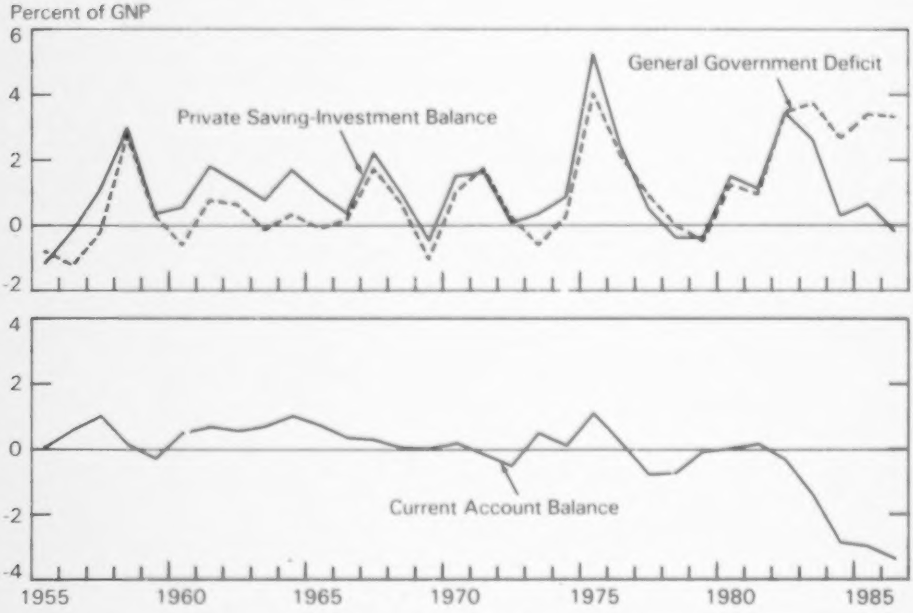
THE GOVERNMENT DEFICIT

The large increase in the general government budget deficit, however, stands in marked contrast to its normal cyclical behavior. The general (Federal, State, and local) government budget deficit averaged 3.4 percent of GNP in 1986. This deficit/GNP ratio, although large, is not the largest experienced during the past 15 years. The general government budget deficit exceeded 3.4 percent of GNP in both 1975 and 1982. The 1975 and 1982 deficits, however, occurred during sharp recessions; the current large deficit comes in the fourth year of an expansion.

As indicated in Chart 3-3, until recently the general government budget deficit has tended to track the private saving-investment balance during cyclical expansions and declines. National saving has approximated national investment and the current account balance has been small. In recessions, government budget deficits typically widen as a result of declining tax revenues and increased expenditures associated with income support. The private saving-investment balance, however, usually increases by more than the cyclically induced decline in the general government budget deficit (because of weak investment and consumption spending), and the current account balance tends to improve. In the sharp 1975 recession, for example, the largest general government budget deficit in the postwar era (measured as a percent of GNP) coincided with one of the largest U.S. current account surpluses.

Chart 3-3

Private Saving-Investment Balance, Government Deficit, and Current Account Balance



Note.—For current account balance, data for 1986 are first 3 quarters at an annual rate; seasonally adjusted.

Source: Department of Commerce.

Similarly, strong investment growth during an expansion usually outstrips increases in private saving, and the private saving-investment balance declines. The associated growth in tax revenues, however, traditionally lowers the general government budget deficit, and the deterioration in the U.S. current account deficit usually remains modest. This pattern has not been followed in the current expansion. The increased surpluses of State and local governments have been more than offset by the large growth of the Federal Government budget deficit. This unprecedented deterioration of the U.S. fiscal position during an expansion, combined with a normal cyclical decline in the private saving-investment balance, has been reflected in an unprecedented deterioration in the U.S. current account balance.

It is important to emphasize that the government budget deficit and the U.S. international payments position are the product of many forces and that the link between them is complex. As noted above, increases in the government budget deficit that result from a cyclical decline are typically associated with improvements in the U.S. international payments position. Clearly it is incorrect to say that movements in budget deficits always cause equal movements in the U.S. current account balance. It is equally clear, however, that the persistence of the Federal deficit late into the current expansion is one of the most important factors contributing to the growth of the trade deficit.

It is also important to emphasize that the desirability of any fiscal measure taken to reduce the current large budget and trade deficits depends critically on whether the measure is desirable in its own right. Federal outlays have remained at a high percentage of GNP. Sustained efforts to control Federal spending are needed not only to preserve the benefits of tax reform but also to reduce the U.S. international payments imbalance. The key point is that a substantial reduction in the U.S. current account deficit will require restraint of U.S. domestic demand growth relative to GNP growth. If this restraint does not come from controlling government spending, it must come from the other components of domestic demand—consumption and investment. Tax increases are not the answer. Higher tax rates would not only lower GNP growth in the short run, but would also continue to dull economic incentives and to reduce growth far into the future. This would make even more painful the necessary adjustment of consumption and investment to bring domestic demand in line with GNP in the long run.

INTERNATIONAL CAPITAL FLOWS

The link between the current account balance and the national saving-investment balance also helps to emphasize the importance of international capital markets and net capital flows in the development of the U.S. current account deficit. The counterpart to the U.S. current account deficit is a capital account surplus; developments influencing one account significantly influence the other. On the one hand, deep, liquid international capital markets have represented a ready source of financing for the large shortfall of U.S. saving relative to U.S. investment. On the other hand, changes in the desirability of holding U.S. assets, particularly dollar-denominated assets, have had substantial effects on exchange rates, thereby affecting the current account.

International capital markets channel resources from the ultimate savers in the world economy to those countries that offer the most attractive opportunities to invest. For example, through most of the 19th century, the inflow of capital from abroad helped the United States to exploit its vast productive potential much more quickly than if U.S. capital formation had been limited to U.S.-based saving. In this case, the associated current account deficit was part of a process that invigorated a then-young economy.

Similarly, the capital inflows now associated with the U.S. current account deficit have once again become an important source of investment financing. Several factors have made the United States one of the most attractive places in which to invest funds. The strong growth of the U.S. economy during the first six quarters of this expansion stood in marked contrast to the sluggish performance abroad, especially in Europe. This growth, combined with the reduction in capital taxation embodied in the Economic Recovery Tax Act of 1981 (ERTA), surely increased the relative attractiveness of investment in the United States.

It is important to recognize, however, that the development of the U.S. current account deficit has also been associated with a sharp drop in the national saving rate (relative to the cyclical peak in either 1979 or 1981). Between 1981 and 1986, the national saving rate fell more than 4 percentage points (Table 3-6). This drop has made the United States increasingly dependent on net capital inflows to finance U.S. investment. In 1986, net capital inflows—and the associated buildup of foreign claims on the United States—equaled one-half of U.S. net capital formation. To the extent that the drop in the national saving rate is not desirable, this dependence on net capital inflows to finance U.S. investment is also not desirable. Part of the decline in the national saving rate has resulted from the failure to bring government expenditures in line with revenues. Part of the increased dependence on capital inflows to finance U.S. investment, therefore, ought to be viewed as a by-product of a fiscal stance that should be corrected by gradually reducing the share of Federal expenditures in GNP.

TABLE 3-6.—*National saving, investment, and net capital inflow*

[Percent of GNP]

Year	Gross private saving	Government saving[1]	Gross national saving	Net capital inflow[2]	Gross private domestic investment[3]
1979	17.8	0.5	18.3	−0.1	18.1
1980	17.5	−1.3	16.3	−.3	16.0
1981	18.0	−1.0	17.1	−.2	16.9
1982	17.6	−3.5	14.1	−.0	14.1
1983	17.4	−3.8	13.6	1.1	14.7
1984	17.9	−2.7	15.2	2.4	17.6
1985	17.2	−3.4	13.8	2.7	16.5
1986[4]	16.2	−3.4	12.8	3.5	16.3

[1] Federal, State, and local governments.
[2] Includes statistical discrepancy.
[3] Nominal prices.
[4] Preliminary.

Source: Department of Commerce, Bureau of Economic Analysis.

This conclusion, however, in no way minimizes the role capital markets have played in driving the current account. Exchange rates are determined in asset markets. As is discussed in the next section, the strong increase in the demand for dollar-denominated assets during the first half of the 1980s, and the consequent appreciation of the dollar between 1980 and early 1985, was a key factor underlying the deterioration of the U.S. current account balance.

EXCHANGE RATES AND COMPETITIVENESS

Exchange-rate changes are a direct channel through which international divergences in economic policy are transmitted to domestic economic performance. Exchange-rate movements that persistently exceed international inflation differentials—real exchange-rate movements—change the prices of a country's imports relative to domestically produced goods and alter the ability of its producers to compete in world markets. This section reviews the behavior of the real foreign exchange value of the dollar and the relative price of U.S. imports over the past decade, investigates the sources of these real exchange-rate movements, and assesses the effect of these exchange-rate movements on the international cost competitiveness of U.S. manufacturers.

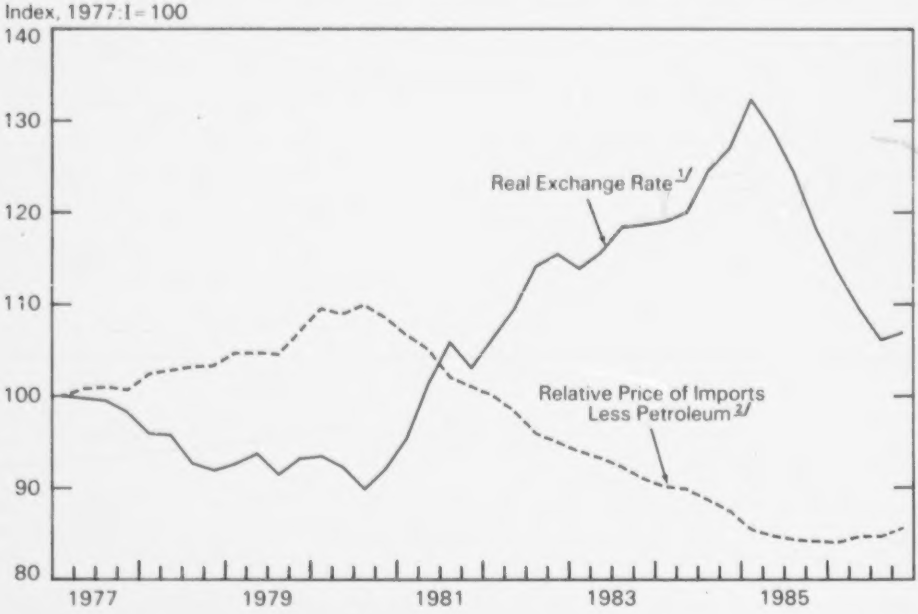
SOURCES OF REAL EXCHANGE RATE MOVEMENTS

The past decade has been characterized by wide swings in the foreign exchange value of the dollar and in the relative price of imports. Chart 3–4 presents an index of the foreign exchange value of the dollar against a trade-weighted basket of currencies from 18 other industrial and 22 developing countries. The index is adjusted for differences in wholesale price inflation in each country and thus measures changes in the real foreign exchange value of the dollar. Also presented is an index of the relative price of non-oil imports, computed as the ratio of the import price deflator excluding petroleum to the total GNP price deflator. As can be seen from the chart, broad movements in the dollar's real exchange rate and the relative price of imports over the past decade can be divided into three phases.

During the late 1970s, the real value of the trade-weighted dollar depreciated and the relative price of imports increased by roughly 10 percent. According to many observers, the weakness of the dollar in the late 1970s was directly related to the perception that the United States was embarked on significantly more inflationary policies than were Japan and many West European countries. This perception led to depreciation of the dollar not only in nominal terms, but also in real terms. The nominal foreign exchange value of the dollar fell

Chart 3-4

Real Exchange Rate and Relative Price of Imports



1/ Trade-weighted value of the dollar adjusted by relative wholesale prices.

2/ Ratio of implicit price deflator for imports less petroleum to GNP implicit price deflator.

Sources: Morgan Guaranty Trust Company of New York and Department of Commerce.

more than was justified by the actual excess of inflation in the United States over inflation in other countries, because the exchange rate responds to expected future inflation as well as to current and past inflation.

The relatively weak dollar during the late 1970s benefited many trade-sensitive industries in the United States. The real depreciation of the dollar shielded these industries from their foreign competitors because, as is shown in Chart 3–4, import prices increased faster than did the prices of domestically produced goods and services. This allowed some manufacturing industries to remain profitable while increasing real wage rates substantially more rapidly than in the rest of the United States economy, despite slow productivity growth. The insulation from foreign competition that the weak dollar provided to many trade-sensitive industries in the United States in the 1970s left many of these industries poorly prepared to deal with such competition in the 1980s.

The first half of the 1980s was marked by an unprecedented surge in the real foreign exchange value of the dollar. From the third quarter of 1980 through the first quarter of 1985, the real value of the trade-weighted dollar appreciated by some 47 percent and the relative price of imports declined by 22 percent. Although some observers have claimed that the dollar's appreciation can be attributed to a single cause, several factors contributed to the sustained rise in the dollar between 1980 and early 1985.

The shift in monetary policy from one of perceived ease and accommodation to an actual and ultimately perceived anti-inflationary stance in the early 1980s was likely critical to the reversal during 1981 and 1982 of the real depreciation of the dollar that had occurred in the late 1970s. Between the third quarter of 1980 and the fourth quarter of 1981, the dollar appreciated in real terms back to its early 1977 level. The dollar appreciated an additional 12 percent in real terms in 1982. This appreciation was likely due, at least in part, to increasingly persuasive evidence that the Federal Reserve was committed to an anti-inflationary monetary policy.

From the trough of the recession in the fourth quarter of 1982 through the first quarter of 1985, the dollar appreciated an additional 15 percent in real terms. The initial dramatic decline and subsequent stability of inflation, in conjunction with the strong growth in real GNP in comparison with both past expansions and growth in most other industrial countries, probably played an important role in the further appreciation of the dollar during 1983-84.

The excess of real domestic demand over real domestic output that has characterized the current expansion translates into an excess of real domestic investment over real domestic saving that, in turn, equals the real net inflow of foreign capital. At least a portion of this capital inflow and the appreciation of the dollar during 1983-84 likely resulted from the increase in the after-tax profitability of physical investment in the United States during this period. The increase in the after-tax profitability of investment resulted from the interaction of the ERTA tax reductions with the decline in inflation, which increased the value of original cost depreciation.

Real business fixed investment grew much more rapidly relative to real GNP in the first 2 years of the expansion than in previous cyclical upswings. Indeed, the share of real business fixed investment in real GNP achieved a postwar record in 1984. This strength occurred despite high real interest rates and concern that the Federal budget deficit would crowd out private investment. Furthermore, the real valuation of the corporate capital stock by the equity markets also surged during this period. As discussed in previous *Economic Reports*, these facts are consistent with the view that changes in the tax law raised the value in equity markets of new physical capital and the attractiveness of foreign investment in the United States.

Since the first quarter of 1985, the real value of the trade-weighted dollar has fallen by 20 percent, back to its late 1981 level. Although the causes of this steep depreciation of the dollar are difficult to isolate with precision, the decline in real GNP growth in the United States since mid-1984 likely contributed to the dollar's fall. In addition, the announced intentions of the Group of Five to seek a lower dollar in the Plaza Agreement and subsequent actions to back up these intentions, especially the continuation of the easing of U.S. monetary policy that began in late 1984, probably contributed to further dollar depreciation after September 1985. More generally, the convergence of economic performance and economic policies of the leading industrial countries in 1985 and 1986 was probably necessary to support a significant adjustment of exchange rates.

So far, little evidence exists of the effect of the substantial depreciation of the dollar on U.S. trade flows. Several factors help to explain this limited impact. Existing empirical evidence indicates that import prices respond with a lag of up to 2 years to even large changes in exchange rates. This phenomenon results from the choice of foreign producers to boost profit margins as their currencies depreciate against the dollar and to allow these margins to narrow so as to maintain market share as their currencies appreciate against the dollar. According to one study, foreign producers widened their profit margins considerably during the 1980-84 appreciation of the dollar. This provided them ample room to narrow profit margins by limiting price increases and thus maintain market share as the dollar depreciated. Indeed, as is shown in Chart 3–4, non-oil import prices actually declined in 1985 and began to rise only in 1986.

Another factor that has limited the immediate effect of the depreciation of the dollar on U.S. trade flows is that the dollar has not in fact depreciated substantially against the currencies of several important trading partners. Total imports from Canada, Korea, and Taiwan exceed imports from Western Europe or Japan, yet the dollar has depreciated less than 7 percent against the currencies of Canada and Taiwan and has actually continued to appreciate against the Korean won.

PRODUCTIVITY AND COMPETITIVENESS

Declining international competitiveness of the U.S. economy, especially manufacturing industries, is often cited as an important cause of the deterioration of the U.S. trade balance. Programs to revive supposedly sagging productivity growth are often recommended as a means of improving competitiveness and reducing the trade deficit.

In fact, as is discussed in Chapter 1, productivity growth in manufacturing during the current cycle has exceeded the postwar average and substantially exceeded the sluggish rate of productivity growth during the 1970s. Since the business cycle peak in the third quarter of 1981, output per hour in manufacturing has grown at an average annual rate of 3.8 percent, 46 percent faster than the postwar average of 2.6 percent per year and more than twice the annual average rate of 1.5 percent recorded between 1973 and 1981. Furthermore, real wage growth in the manufacturing sector has exhibited notable restraint during the current cycle. Since the business cycle peak, real hourly compensation in manufacturing has grown at an average annual rate of 1.0 percent, 50 percent slower than the postwar average annual rate of 2.0 percent.

As the result of restrained wage increases and strong productivity growth, unit labor costs in manufacturing have increased at an average annual rate of only 0.7 percent since the 1981 peak and have actually declined at an average annual rate of 0.8 percent since the recession trough in the fourth quarter of 1982. By contrast, unit labor costs in manufacturing have grown at an average annual rate of 3.4 percent over the entire postwar period and grew at an average annual rate of 8.2 percent between 1973 and 1981.

Table 3–7 compares movements in unit labor costs in the United States with a trade-weighted average of unit labor costs in 11 of the largest foreign industrial countries. As is shown in the second column of the table, when measured on a national currency basis, growth in unit labor costs during the first half of the 1980s was 5 percentage points higher abroad than in the United States. In the absence of other developments, the relatively better U.S. performance—which was a product of surging productivity growth and restrained wage increases—would have improved U.S. international cost competitiveness. However, the cost competitiveness of U.S. manufacturers also depends upon the dollar exchange rate. Foreign importers can charge a lower dollar price to cover the same level of national currency costs when the dollar appreciates against their own currencies.

As indicated by the third column of Table 3–7, the appreciation of the dollar during the first half of this decade overwhelmed the other determinants of international cost competitiveness. In national currency terms, unit labor costs in the 11 largest foreign industrial countries rose more than 16 percent during the first half of the 1980s; in dollar terms, foreign unit labor costs fell nearly 20 percent. Instead of experiencing a 5 percent improvement in U.S. international cost competitiveness between 1980 and 1985, the strong appreciation of

TABLE 3-7.—*U.S. and foreign unit labor costs, 1980–85*

[1980 = 100]

Year	United States	Eleven foreign industrial countries[1]	
		National currency basis	Dollar basis
1980	100.0	100.0	100.0
1981	107.3	108.2	96.9
1982	114.0	114.4	91.6
1983	111.1	115.4	88.5
1984	110.5	115.1	81.9
1985	111.2	116.3	80.3

[1] Trade-weighted average of Belgium, Canada, Denmark, France, Germany, Italy, Japan, Netherlands, Norway, Sweden, and United Kingdom.

Source: Department of Labor (Bureau of Labor Statistics) and Council of Economic Advisers.

the dollar boosted the ratio of U.S. unit labor costs to foreign unit labor costs by 39 percent.

This gap between the unit labor costs in U.S. manufacturing industries relative to manufacturing industries in most other industrial countries has been narrowed significantly by the depreciation of the dollar that began in early 1985. According to the International Monetary Fund, the ratio of unit labor costs in the United States to a trade-weighted average of unit labor costs expressed in dollars in other industrial countries fell almost 30 percent to its 1981 level between the first quarter of 1985 and the second quarter of 1986.

In sum, the deterioration of international cost competitiveness in U.S. manufacturing during the first half of this decade was the result of the real appreciation of the dollar, not sagging productivity growth or excessive wage increases. This fact does not imply, however, that the United States can or should rely solely on exchange-rate movements to improve further its international cost competitiveness. Exchange-rate depreciation can increase competitiveness in the intermediate run by making foreign-produced products more expensive, but at the cost of slower real income growth. By contrast, improving international cost competitiveness through greater productivity and economic efficiency increases real income growth. The United States should seek to strengthen international competitiveness by implementing policies that increase productivity. The President is sending to the Congress a package of initiatives to enhance further U.S. productivity and competitiveness, including increased funding for basic and applied scientific research, reforms of Federal regulations to reduce business costs while continuing to serve important regulatory goals, and efforts to improve access for U.S. products and services in foreign markets.

POLICY COORDINATION AND EXCHANGE RATE STABILITY

There is general agreement among economists that better convergence of economic performance and better coordination of economic policies among the leading industrial countries is both desirable and essential for achieving greater stability of exchange rates. At the Tokyo Economic Summit, the leaders of the seven largest industrial countries agreed to a flexible approach to improving the international monetary system by providing more effective procedures for the coordination of economic policies. The approach adopted in Tokyo represents an important step down the path to greater convergence of economic performance and better coordination of economic policies—a path that was charted at earlier Economic Summits and Ministerial Meetings, including especially the Versailles Economic Summit and the Group of Five meeting of September 1985. Three features of the approach outlined at the Tokyo Summit deserve particular emphasis.

First, efforts at policy coordination will not focus narrowly on achieving specific values or ranges for exchange rates. Policymakers are to consider a broad class of indicators of economic performance and economic policy: GNP growth rates, inflation rates, interest rates, unemployment rates, fiscal deficit ratios, current account and trade balances, monetary growth rates, reserves, and exchange rates. This approach should help to avoid the inherent weakness of pegged exchange-rate systems: rigid commitments to particular exchange-rate values or ranges become too expensive in terms of other important policy objectives and ultimately collapse under the pressure of policy conflicts. The Tokyo Summit leaders explicitly stated that the objectives of policy coordination are much broader than limiting exchange-rate movements. Objectives include "promoting non-inflationary economic growth, strengthening market-oriented incentives for employment and productive investment, opening the international trading and investment system and fostering greater stability of exchange rates."

Second, individual nations are responsible for formulating their economic objectives and forecasting the critical indicators of economic policy and performance. Collective assessment of the mutual compatibility of objectives and forecasts is required as the essence of policy coordination, and the managing director of the International Monetary Fund is assigned his traditional role in assisting multilateral surveillance. However, no agency is asked to undertake the essentially impossible task of forcing sovereign nations to pursue policies contrary to their perceived national interests. Instead, the onus is on individual nations to live up to their own commitments and forecasts.

Third, when significant deviations from the intended and agreed upon course arise, individual nations are pledged "to make their best efforts to reach understanding on appropriate remedial measures. . . ." This pledge is not an effort to fine-tune the world economy to correct for all of the minor and inevitable deviations from its forecasted path. The emphasis is on "significant deviations from intended course." Further, the Summit leaders agreed that remedial efforts should "focus first on underlying policy fundamentals. . . ." This agreement does not preclude official intervention in foreign exchange markets, when such intervention would be useful. However, it does place the emphasis for policy coordination where it belongs—on the economic policies that ultimately influence important developments in the world economy.

Experience with the operation of this new system of policy coordination will contribute to its further development. Even at this stage, however, it is clear that better policy coordination offers the promise of more stable exchange rates, reduced external imbalances, and a more favorable economic environment for developing countries.

CURRENT REQUIREMENTS FOR POLICY COORDINATION

In the period ahead, the principal challenge of policy coordination is to reduce present international payments imbalances in a manner that will support sustained, noninflationary growth in the world economy. Unilateral actions by the United States are not sufficient to accomplish this goal. Although a sharp U.S. recession would probably improve the U.S. trade balance, it would not only injure economic well-being in the United States, but would also sharply curtail prospects for growth in the rest of the world. Massive dollar depreciation, by shifting world demand toward U.S.-produced goods, would help reduce the U.S. external deficit but at a cost of increased inflationary pressures in the United States and depressed output growth in the main U.S. trading partners. Put simply, reduction of the U.S. current account deficit requires that real GNP in the United States grow more strongly than domestic demand. This implies that real GNP growth abroad will fall short of foreign domestic demand growth. Unless foreign domestic demand strengthens, improvement in the U.S. current account balance will necessarily be associated with reduced foreign growth. Given the size of the potential adjustment in the U.S. current account, the risk is that foreign growth would be sharply reduced.

An essential element of any program to reduce current external imbalances, therefore, is that other industrial countries must achieve stronger, domestic-led growth. Stronger domestic demand growth is needed primarily to maintain satisfactory output and employment growth in these countries while the United States adjusts. It is also needed to engender the much needed expansion of U.S. export markets without having to rely on further massive depreciation of the dollar. Finally, strengthened foreign domestic demand is needed to maintain the growth of demand for the exports of many developing countries. Many of these countries, especially those with debt service problems, face considerable pressures to improve their external positions. The United States, however, will be reducing, not increasing, its external deficit; thus, further improvements of the developing countries' payments positions must come from the other industrialized countries.

Because the reduction of the U.S. current account deficit will take time, strengthened foreign growth must be sustained over the medium term. Achieving such long-lasting improvements requires the elimination of those structural (i.e., microeconomic-based) distortions that have impeded growth. In particular, to ease adjustment in the traded goods sectors, efforts must be redoubled to eliminate not only those practices that have restrained domestic demand but also those rigidities that have reduced the mobility of labor and capital between sectors. In Western Europe, where the recent economic recovery has coexisted with sustained rises in unemployment—in some countries to depression levels—there is a clear need to reform those policies that have reduced labor flexibility and have rendered employment unprofitable. In Japan, where the emphasis has been on export-led growth, the need is to eliminate those policies that have hindered domestic demand. In many countries there is a need to consider tax reforms that would substantially lower marginal tax rates, without necessarily reducing government revenues in the long run. These measures are desirable not simply because they would indirectly help reduce present external imbalances; they are desirable because they would improve long-term economic performance and well-being.

Efforts by foreign industrial countries to effect a growth-oriented reduction in external imbalances must be matched by corresponding efforts by the United States. Reductions in the U.S. current account deficit require that domestic demand in the United States grow less rapidly than GNP and that national saving increase by more than national investment. The United States can make a critical contribution to achieving these results by reducing the Federal deficit through expenditure restraint. Restraint on Federal spending would help slow domestic demand growth, but the effects of this slowing would not significantly reduce GNP growth, provided that stronger growth of demand abroad and the lagged effects of dollar depreciation boost U.S. exports.

The preferred approach to unwinding current external imbalances calls for continued growth of world demand, but with a smaller contribution coming from the United States and a larger contribution from surplus countries. Domestic demand growth abroad would expand faster than potential GNP, while domestic demand in the United States would grow more slowly than potential output. Movements in exchange rates would offset the effect of these changes in the sources of world demand for any one country's products. In the United States, the reduced size of the government would allow for a greater percentage of the Nation's output to be devoted toward private investment and consumption.

Two other elements are also essential for the effective implementation of this program. First, developing countries, especially those with external debt problems, need to adopt more growth-oriented policies. The critical issue here is really for developing countries themselves to make the reforms necessary to support long-term growth. However, the industrial countries and the international financial system have an important role to play in assisting countries that are moving toward more growth-oriented reforms. This role is the essence of the program articulated by the Secretary of the Treasury in October 1985 to deal with the problems of debtor countries. The long-term goal of this approach is to restore the access of these countries to international capital markets by increasing their capacity to service their debts. By taking the measures needed to restore their access to international credit markets, these countries will not only be pursuing policies that will promote long-term growth with existing resources, but will also restore the capital inflows needed to underwrite additional investment and growth. These developments would primarily benefit the developing countries themselves. They would also expand markets for the products of the industrial countries. Meanwhile, industrial countries can contribute to growth-oriented adjustment in developing countries by sustaining a growing market for their exports. (For a detailed analysis of this subject, see *Economic Report of the President*: 1986, Chapter 2.)

Finally, all countries must avoid new protectionist measures and work to reduce and eventually dismantle existing barriers to international trade in both goods and services. Much attention has recently focused on growing protectionist sentiment in the United States. Progress in reducing the U.S. trade deficit, combined with efforts abroad to reduce protectionism in foreign markets, are clearly important in resisting protectionist actions in the United States.

Similarly, efforts in the United States to resist protectionism are needed to prevent the awakening of protectionist forces abroad. International trade, after all, is dominated by trade in goods. Just as most of the deterioration of the U.S. trade balance was in manufactures, improvements in the U.S. trade balance will come about largely from a swing in manufactures trade. This development will present serious adjustment problems for U.S. trading partners, especially as the performance of manufactures output in many countries, notably Western European countries, has been weak. It would be singularly unfortunate, therefore, if the United States were to suggest—just as its trade position was beginning to improve—that protectionist measures were an acceptable response to these adjustment pressures. In the end, all countries share an important common interest in the liberal system of international trade and must work to protect and expand that system.

International policy coordination will always be made difficult by intercountry differences in economic situation and policy priorities. At a minimum, however, it is important to identify those situations in which joint actions will reinforce efforts to achieve individual as well as common goals. Clearly, it is in every nation's interest that international payments imbalances unwind in an environment of continued world growth. Actions by other nations to strengthen their domestic demand and to reduce structural rigidities that have impeded adjustment, combined with resolute action by the United States to restrain Federal spending, offer a means of accomplishing this goal.

CHAPTER 4

Opening International Markets

ONE OF THE MORE REMARKABLE FEATURES of the past 40 years has been the rapid increase in real income per capita in many parts of the world. This economic expansion has been fueled in large part by a tremendous growth in world trade. In turn, growth in world trade has resulted from a major effort led by the United States and other countries to reduce global barriers to international commerce.

These events stand in direct contrast with the decade preceding the start of World War II. Then, stagnation in the domestic economies of major nations was compounded by the spread of import barriers, export subsidies, trade wars, and a general emphasis on closing domestic markets to foreign competition.

Determined not to see this scenario unfold again after the war, the United States sparked a move to establish a world trade system complete with firm rules to govern trade practices and to ensure that trade policies would not degenerate into beggar-thy-neighbor protectionism. International organizations were created to guide the world economy along this new path. Among them was the General Agreement on Tariffs and Trade (GATT), set up to initiate a reduction of trade barriers and to mediate commercial disputes between member nations.

GATT has presided over seven multilateral rounds of negotiations that have produced historic global tariff reductions. As tariffs have come down, the volume of international trade has increased much faster than world production. Unfortunately, while GATT has been expanding trading opportunities among countries, largely through tariff reductions, these efforts have been undermined by new and much less transparent protectionist measures.

The world thus stands at a crossroads similar to the one it faced 40 years ago. The commercial playing field is littered with government policies aimed at protecting various industries from the rigors of international competition. Trade in major product sectors—including steel, automobiles, electronics, textiles, apparel, and footwear—is becoming increasingly regulated by measures such as voluntary export restraints and orderly marketing agreements. The cost of these policies is enormous while the benefits reach only a few. Unless something reverses the trend toward government-sponsored trading arrangements, the growth enjoyed by world economies over the past four decades could be severely curtailed.

The United States, as the largest participant in world trade and as a long-time champion of free trade, stands in a unique position to fight this move toward greater protectionism. From its start, the Administration has supported free trade. Most recently, it reaffirmed this position in a policy statement issued on September 23, 1985, which contained a multipronged program to enhance and strengthen the international trading environment. Elements of the program included macroeconomic policies aimed at dollar realignment, fiscal deficit reduction, and an effort to ease the debt burden of developing countries.

With respect to trade policy, the statement proposed that the United States undertake a number of bilateral measures aimed at reducing foreign trade barriers. A second thrust of U.S. trade policy would be to rekindle the GATT process by urging fellow members to enter into a new round of multilateral trade talks.

More than a year has passed since these policies were announced. Using a series of self-initiated cases under Section 301 of the Trade Act of 1974, the Administration has sought to eliminate certain unfair trading practices of foreign governments. A fund of money has been established to support Export-Import Bank loans as part of an effort to persuade foreign countries to restrict and eliminate commercial subsidy elements of their foreign aid grants. Bilateral talks aimed at establishing free-trade areas have been concluded with Israel and begun with Canada.

And because of a leading role taken by the Administration, a new round of multilateral trade liberalization talks—held under the auspices of GATT—has commenced in Geneva. This new round presents an important opportunity for rolling back interventionist measures and for strengthening rules of conduct in international trade. Indeed, it offers prospects to rein in the various new forms of protection that have arisen because of current weaknesses in the GATT process. The new round also provides the opportunity to extend rules of commercial relations to areas previously exempted from or not covered by GATT, including agriculture, services, direct foreign investment, and intellectual property rights.

This chapter reviews the Administration's trade policy initiatives of the past year, especially as they relate to efforts to open foreign markets. The fundamental premise behind these efforts is that free trade offers Americans the greatest hope for a prosperous future. Consequently, this chapter begins by reviewing the benefits of free trade.

THE CASE FOR FREE TRADE

Governments have long interfered with the exchange of goods across their boundaries. One purpose of their barriers was to collect revenues through tariffs or tolls. Local industry usually supported and benefited from the protective effect of these policies. Indeed, in many instances, pressure from domestic producers induced governments to shelter them from foreign competition with trade restrictions. Another purpose was to achieve trade surpluses through export subsidies and import restrictions. These policies, whose ostensible goal was to increase and preserve domestic wealth at the expense of other countries, became known as mercantilism.

For more than 200 years, many economists have argued against mercantilist policies and made the case for free trade. They generally believe that restrictions on commercial activity reduce wealth rather than increase it. Conversely, the argument for free trade is relatively simple yet compelling.

The case for free international trade is much the same as the case for free internal trade. Commerce between the United States and Japan benefits Americans as does commerce between New York and California. The exchange of goods, internally or internationally, arises as a natural outcome of specialization. Because of factors such as climate, natural resource endowments, or technology, different economic regions possess different abilities to produce certain goods. Individuals, firms, and industries within these regions tend to concentrate their efforts in the goods and services that they are best able to produce. Then their output is exchanged in the marketplace for that of other economic agents.

Specialization allows for a more efficient use of scarce resources and permits improved productivity of the economy. The larger the size of the market, the greater are the possibilities for specialization and for increasing the wealth of the community. The extent of specialization in international trade is related to the forces of international competition. As barriers between markets are lowered, some domestic producers will face increased competition from abroad. Other producers will exploit export opportunities as accessible markets expand. Hence, production will tend to contract in industries where foreign goods are superior relative to domestic goods on a price and/or quality basis. In those industries where domestic goods are relatively superior to foreign, local output will expand. These latter industries are said to have a comparative advantage.

In essence, comparative advantage means that an industry will export if it is more efficient relative to other domestic industries. An industry's productivity relative to other industries within the same country determines its ability to command scarce resources within that economy and, thereby, to export to the rest of the world. Thus, a local industry's efficiency compared with that industry in foreign countries is not the main determinant of whether it exports or faces import competition.

Because comparative advantage refers to an internal ranking of productivity, a country may import goods even if the local producing industry is more efficient than its foreign rival. A country will tend to concentrate production in those industries in which it has the greatest comparative advantage. Standards of living rise as resources are put to their most productive uses. One sign of rising standards of living, of course, is a rise in real wages.

A common misconception about international trade is that it is unfair. For instance, some argue that because U.S. wages are high relative to wages in other countries, U.S. producers cannot compete. This argument is true for some industries, but not true in general. U.S. wages are high because American workers are in general more productive than their foreign counterparts. The relatively high U.S. productivity comes about from this Nation's enormous stock of physical and human capital. As U.S. productivity levels increase, so do wages paid to workers. This puts upward pressure on wages even in relatively inefficient sectors of the economy. But if wages rise and productivity does not keep pace, then American firms will have trouble competing.

An instructive example comes from the U.S. steel industry. From 1965 to 1981, wages rose much faster than labor productivity in steel and faster than wages and labor productivity in overall manufacturing. As a consequence, unit labor costs increased dramatically, and the comparative advantage of U.S. steel products deteriorated badly. In other sectors where wages are relatively high but productivity remains strong, such as aircraft and computers, U.S. products compete successfully in world markets.

In addition to raising the general standard of living, the forces of free trade also produce dynamic gains for the economy. These benefits accrue because, in the absence of government intervention, investment in new plant and equipment and in research and development tends to concentrate in the most efficient sectors of the economy. This increases the rate of growth of the economy. Conversely, in an economy riddled with protectionist policies, investment is often diverted from more efficient industries because of government-induced distortions in relative rates of return.

Finally, political gains arise from free-trade policies. As countries rely more on each other for goods and services, they are more likely to settle international disputes through negotiation rather than hostile action. An example is the remarkable reduction in national tensions between the countries of Western Europe since the adoption of internal free-trade policies following World War II.

It is sometimes argued that the benefits of free trade depend upon special assumptions about economic behavior. But the case for free trade is quite general. Early arguments for free trade assumed that industries were perfectly competitive and that trade arose from climatic or technological differences between countries. Later, economists focused on trade resulting from relative differences in national endowments of factors of production, such as labor and capital. In both instances, the free-trade outcome was one where production expanded along the lines of comparative advantage and countries enjoyed the consequent gains of trade.

More recent theories of international trade flows stress the importance of imperfectly competitive market structures arising from such phenomena as increasing returns to scale and domestic barriers to entry. Even here, however, free international trade is beneficial. Expansion of markets because of freer trade may allow a firm to realize economies of scale from an output level higher than would be expected in the absence of trade. These economies can then be passed on to the consumer as lower prices. Expansion of markets through free trade also leads to an erosion of monopoly power enjoyed by those industries where both significant barriers to domestic entry and foreign competitors exist. Another source of gain is the benefit to consumers from an increase in product diversity, in both quality and variety.

The benefits of free trade are relatively independent of actions taken by foreign countries. In particular, it is often argued that because protectionist policies exist in foreign countries the United States must follow suit. This argument is generally false. The benefits to the United States flow from buying goods and services for which foreign producers have a comparative advantage and selling U.S. goods and services where U.S. companies have a comparative advantage. To the extent that foreign policies reduce these trade possibilities, those countries and the United States gain less.

Furthermore, the benefits of free trade do not require that trade be balanced at any point in time. Indeed, overall trade balances and the associated international capital flows allow countries the mutual benefit of trading goods and services over time. Countries with overall trade deficits borrow from the rest of the world. Such borrowing can provide the requisite funds for financing investment expenditures crucial to economic growth. Countries with overall surpluses lend to the rest of the world. This lending raises the wealth of the country if it is allocated to projects that earn higher rates of return than would otherwise be possible. However, neither borrowing nor lending can go on indefinitely, and economic forces will work over time to ensure that imbalances are closed. Thus, trade in goods and services between any country and the rest of the world tends to be in balance over the long run.

On the other hand, trade between any two countries may never be in balance. For a variety of reasons, countries tend to amass surpluses with some countries and deficits with others. Unfortunately, interest in bilateral trade balances—essentially a mercantilist trait—remains great. In May 1986, the House of Representatives passed an omnibus trade bill, H.R. 4800, that called for the President to identify countries that have "excessive" trade surpluses with the United States and then to negotiate with or take actions against these countries, regardless of the underlying causes of the surpluses. The President labeled the bill "kamikaze legislation" and promised to veto the measure, but it died when the 99th Congress adjourned.

Despite the obvious benefits of a liberal trading order, various forms of protection abound and are proliferating at an alarming rate. Why do governments continue to pursue these policies? Various justifications have been put forward by governments to defend protectionist policies. Examples include government revenue, national defense, unfair foreign trade practices, preservation of certain ways of life, and short-term aid to revitalize industry.

Whatever the motive, protection in any form redistributes income and wealth. And because the redistributive effects are usually not readily apparent, special interest groups sometimes favor and governments often choose these methods over other more visible and much less costly forms of subsidy. Protection raises the price of imports and domestically produced import-competing products. But, consumers are seldom aware of the tax imposed upon them by protection because they rarely have the opportunity to observe the difference between domestic and world prices. The cost of protection to consumers can be quite dramatic. For instance, the Council of Economic Advisers estimated that if Congress had been successful in its attempt to override the President's veto of the Textile and Apparel Trade Enforcement Act of 1985, Americans would have had to pay up to an additional $44 billion for textiles and apparel over the next 5 years.

Given these considerations, the Administration supports policies designed to improve the efficiency and productivity of the U.S. economy. Such steps should make Americans more prosperous. These policies include retraining for displaced workers, reforming antitrust laws, and strengthening property rights, both domestically and abroad. Other initiatives include the repeal or reform of regulations that unnecessarily impinge upon U.S. competitiveness.

SECTION 301 ACTIONS

Trade imbalances are largely macroeconomic phenomena, not related directly to market access barriers or unfair trade practices by foreigners. But trade barriers and unfair practices distort economic activity and generally harm economic efficiency. For this reason, the Administration is committed to eliminating foreign trade policies that pose a significant burden on U.S. exports.

Section 301 of the Trade Act of 1974, as amended, provides the authority and procedures for the President to act against certain unfair trading practices of U.S. trading partners. The President must first find that action is appropriate to enforce U.S. rights under any trade agreement, or to respond to any act, policy, or practice of a foreign country that (a) is inconsistent with the provisions of, or otherwise denies the United States benefits under, any trade agreement, or (b) is unjustifiable, unreasonable, or discriminatory and burdens or restricts U.S. commerce. If he so finds, then he is authorized to act to enforce these rights or to eliminate the act, policy, or practice.

Unjustifiable practices are those that violate or are inconsistent with U.S international rights. The term "unreasonable" refers to acts, policies, or practices that are not necessarily illegal or inconsistent with U.S. international legal rights, but are viewed as being unfair. The act applies not only to practices that harm U.S. trade in goods and services, but also to actions against U.S. direct foreign investment that affect trade in goods or services.

Section 301 is administered by the Office of the U.S. Trade Representative (USTR). Petitions may be filed by any interested party or they may be "self-initiated" by USTR on its own or at the request of the President. Once an investigation has been opened, USTR, in cooperation with other U.S. Government agencies, determines the extent of harm to domestic interests and recommends action for the President. At the same time, USTR consults with the foreign government involved in the complaint and attempts to negotiate a settlement.

Depending upon the specific nature of the alleged practice, USTR has up to 12 months to conclude the investigation and recommend action to the President. If no solution is reached, USTR may recommend that the President impose duties or other restrictions on imports from the foreign country or take any other action authorized by law. Retaliatory actions taken under Section 301 may be nondiscriminatory or solely against the goods and services of the foreign country involved in the dispute. The products subject to retaliation need not correspond to the products related to the dispute.

Between January 1975 and November 1986, 57 cases had been initiated under Section 301. Table 4-1 details the disposition of these cases. In addition, numerous firms and industry groups have consulted with USTR regarding the Section 301 process or have filed and then withdrawn their petitions before a case could be initiated. More than 60 percent of initiated cases were begun under the current Administration. Until 1985, all of these came as the result of privately filed complaints. Recently, however, the role of Section 301 as an active component of U.S. trade policy has grown, with the President directing USTR to self-initiate four investigations and three trade actions aimed at the practices of several U.S. trading partners. Five of the seven proceedings have been favorably resolved, while two are pending. Brief descriptions of the circumstances of these self-initiated cases follow.

TABLE 4-1.—*Summary of cases under Section 301*

[January 1975 to November 1986]

Category	Number
Petitions considered	57
Petitions withdrawn	6
Cases terminated:	
Due to resolution of dispute	20
Due to other reasons	4
Cases resulting in retaliation	12
Cases suspended	3
Cases pending	15

Note.—Case resolutions do not equal number of petitions considered because cases may fall into more than one category.

Source: Compiled by Council of Economic Advisers from data provided by Office of the U.S. Trade Representative.

Self-initiated Section 301 Cases

On September 16, 1985, at the request of the President, an investigation was begun into practices that act as a barrier to U.S. cigarette sales in Japan. These practices included tariffs combined with internal ad valorem excise taxes, an absolute prohibition on the manufacture of foreign cigarettes in Japan, discriminatory treatment in the collection of excise taxes, and restrictions on the distribution of foreign cigarettes. Bilateral consultations were held between representatives of USTR and the government of Japan. Japan promised to suspend altogether tariffs on cigarette imports. It also agreed to eliminate the discriminatory deferral in collecting excise taxes, terminate discriminatory distribution practices, and make its price approval system virtually automatic. On October 6, 1986, the President suspended the investigation with the intent that it be terminated upon full implementation of the agreement.

In the autumn of 1985, the President directed USTR to self-initiate two Section 301 investigations against the practices of Korea. The first involved restrictions on the ability of U.S companies to sell fire and life insurance in Korea. The second was aimed at the lack of effective protection of U.S. intellectual property rights, such as copyright protection for literary and artistic works, including computer software, and patent protection for chemical and pharmaceutical products. Bilateral consultations resulted in agreements covering both complaints. The first increased U.S. market access to Korea's insurance market by allowing U.S. insurers to underwrite both life and other insurance. The second promised to expand dramatically the protection of intellectual property rights. The President approved the agreements in August 1986, and the investigations were terminated.

On August 1, 1986, the President determined that Taiwan's practice of calculating customs duties based on prices listed in duty-paying tables violated a trade agreement or was unjustifiable and a burden on U.S. trade. In effect, this practice had led to increased duties paid to Taiwan, because the prices in the tables often exceeded transactions values. Before USTR could recommend an appropriate method of retaliation, Taiwan agreed to stop the practice.

In October 1985, Taiwan agreed to provide greater market access for U.S. exports of beer, wine, and cigarettes within 6 to 12 months. In particular, Taiwan agreed to lift an import ban on beer and to allow U.S. products to be sold at all retail outlets where Taiwanese products were sold. It also agreed to limit retail markups on U.S. products to the level applied to local products and to allow market forces to determine the levels of importation of U.S. products.

On October 27, 1986, the President determined that Taiwan had not honored the agreement and accordingly found the Taiwanese practices to be unreasonable and a burden on U.S. commerce. He directed USTR to retaliate. On December 5, 1986, before the retaliation could be implemented, Taiwan agreed to settle the dispute and the President ordered the case terminated.

On March 31, 1986, the President announced his intention to impose quotas on several European Community (EC) products in response to EC restrictions affecting U.S. exports of oilseeds and grains to Portugal. He also vowed to increase tariffs on certain products if the EC did not provide compensation for reduced U.S. exports of corn and sorghum to Spain as a result of the replacement of Spain's 20-percent tariff on these products by the EC's variable levy. The EC had taken its actions in connection with the accession of Spain and Portugal to the EC.

On May 15, 1986, the President imposed quotas on EC imports in response to the Portuguese import restrictions. However, to date, these actions have not restricted trade. On July 2, 1986, the EC and the United States reached an interim agreement, and the quotas were lifted to permit continued sales of corn and sorghum to Spain for an additional 6 months. Both sides had agreed to December 31, 1986, as a deadline for the final agreement. Unfortunately, subsequent negotiations have failed to produce a settlement. Consequently, on December 30, 1986, the President announced that ad valorem tariffs of 200 percent would be placed on certain products, primarily imported from the EC, with a trade value approximately equal to the estimated loss of corn and sorghum exports. The tariffs will be implemented no earlier than January 31, 1987, thus allowing additional time for negotiations.

On September 16, 1985, at the President's direction, USTR began a Section 301 investigation into all aspects of Brazil's computer and computer-related (informatics) products policies. Included in the investigation were practices concerning import restrictions, limitations on U.S. investment, and failure adequately to protect intellectual property rights. On October 6, 1986, the President announced that Brazil's informatics policy was unreasonable and a burden or restriction on U.S. commerce, but ordered that the case be continued until December 31, 1986, to give both sides more time to reach an agreement. In the meantime, he requested that USTR notify GATT of U.S. intentions to suspend the application of tariff concessions to Brazil and to effect such suspensions when appropriate.

In the weeks that followed the Presidential announcement, some progress was achieved on certain procedural aspects of Brazil's informatics policy. Consequently, on December 30, 1986, the President suspended those aspects of the investigation. In addition, he ordered a further extension, until July 1, 1987, to give negotiators additional time to settle remaining issues in the case.

Analysis of Section 301 Actions

The Administration's decision to self-initiate several Section 301 cases has sent important signals. First, U.S. industries know that if they encounter unreasonable trade barriers in foreign markets, a mechanism exists to help them overcome these barriers. Moreover, both the self-initiations and actions in cases initiated in response to industry filings demonstrate U.S. concern to its trading partners about their commercial policies. The message of the Section 301 process is that in the products and countries involved in the various cases, the United States thinks its comparative advantage is being unfairly denied.

Section 301 puts the weight of the President behind disputes over specific, narrowly defined trade practices abroad. This attention sharpens the focus of the dispute and allows pressure to build on a clear and remediable problem. The threat of retaliation can provide leverage to negotiate an end to unfair foreign practices. Section 301 also encompasses a greater range of issues (in goods, services, investment, and intellectual property rights) than does GATT.

Section 301 should be used with caution. Actions taken under it may be perceived as an intrusion into the policies of a foreign government. And, while these policies may clearly be egregious and often lower the economic welfare of the foreign country, in some cases the threat of retaliation may not provide the best incentive for successful resolution of the issue.

Political leaders may not want to appear to be vulnerable to foreign threats and may resist a mutually beneficial agreement to preserve national pride. Thus, Section 301 cases are most likely to succeed in areas that have little economic and political significance to foreign governments, and retaliation is more likely in those cases with significant foreign national interest.

The level of contentiousness is even higher when the process is initiated at the President's direction without a petition filed by a U.S. firm or industry. In these cases, it is most unlikely that the investigation will lead to any finding other than unreasonableness. The possibility of abandoning the case because the costs of retaliation are too high is limited.

U.S. retaliation may inflict as much or more harm on the American economy as it does on its target. In addition, unless carefully handled, it is likely to violate GATT rules, undermining an already weak international dispute settlement process. Moreover, retaliation does not always stop with the issue at hand, but may escalate into further rounds of retaliation and counter-retaliation. The potential for mutually destructive trade wars rises with the magnitude of the case and with the size of the trading partner.

While the focus of a Section 301 case is usually on a specific product, the effects of a settlement may extend to other related areas. For instance, the recently concluded agreement with Japan over trade in semiconductor products has led, at least temporarily, to increases in the prices of these products. As semiconductor prices rise, the competitiveness of industries using these products as inputs may diminish.

Several proposed trade bills recently considered by the 99th Congress would have amended the Section 301 decisionmaking process. Most of these proposals are ill-advised. For instance, Senate bill S.1860 would have mandated the President to self-initiate several Section 301 investigations each year. It would also have required the President to retaliate if settlement were not reached after a fixed period of time. Such requirements add inflexibility to areas where flexibility is vital, and do nothing to address the fundamental problem of opening foreign markets. The decision to self-initiate raises the stakes in the negotiating process. Section 301 currently allows the President to lend the force of his office in those situations where it most benefits the outcome of the process.

Finally, the credibility of U.S. complaints about foreign trade barriers depends in part on the extent of its own barriers. U.S. tariffs are low on average, but tariffs on certain products remain high and nontariff barriers affect a significant percentage of total imports. For example, the United States participates in the international Multifiber Arrangement, which authorizes complex bilateral trade-restricting agreements between exporters and importers of textiles and clothing. The United States has asked its trading partners to limit their exports of steel and machine tools and uses nontariff barriers or high tariffs to restrict trade in sugar, dairy products, lumber products, motorcycles, and a number of other goods.

MARKET-ORIENTED, SECTOR-SELECTIVE TALKS

A much less confrontational approach to bilateral market opening is represented by a series of sectoral negotiations between the United States and Japan. Following the successful conclusion of talks to liberalize Japanese financial markets, both governments sought to address the often contentious issue of commercial trade with Japan. In 1985, high-level discussions, called Market-Oriented, Sector-Selective (MOSS) talks, began with the purpose of identifying and removing impediments to market access in Japan. Sectors initially chosen for discussion were telecommunications, electronics, medical equipment and pharmaceuticals, and forest products. Transportation machinery was added later.

The MOSS talks have shown substantial progress. Japan has implemented reforms in telecommunications, forest products, and medical equipment and pharmaceuticals. MOSS discussions on electronics were largely preempted by the semiconductor agreement. Negotiations in transport machinery, especially involving trade in automobile parts, still continue.

RECIPROCAL MARKET OPENING INITIATIVES

Opening markets on a piecemeal basis is difficult and inefficient. A more fruitful approach is to enter into discussions with foreign governments to open all markets reciprocally. These discussions can occur on a bilateral or multilateral basis. Important progress was made on both fronts in 1986.

A free-trade area (FTA) is an arrangement between two or more countries to remove barriers to trade among themselves but to maintain separate barriers with respect to nonmember countries. The benefits from FTAs resemble those attributed to free trade in general: expansion of market size can lead to efficiency gains through specialization. Consumers gain because they pay lower prices for certain goods because of increased competition.

Conclusion of FTA agreements can help to maintain the momentum for liberalizing trade. When the international climate does not permit widespread reductions of trade barriers, liberalization among like-minded nations promotes free trade. When nations that refuse to reduce their trade barriers see that others will achieve gains from trade by reducing barriers bilaterally, they might reconsider their commercial policies and join the effort to open markets.

FTAs have their problems. The potential cost of FTAs relative to freer trade in general arises from the fact that FTAs discriminate in favor of trade between member nations and against trade with nonmember countries. Hence, the source of trade may be diverted away from the lowest cost world producer in favor of a higher cost FTA member.

Both the Administration and Congress, however, think that free-trade area arrangements are worthwhile. The Administration's 1985 trade policy statement noted that bilateral negotiations are no substitute for multilateral negotiations, but that "such agreements could complement our multilateral efforts and facilitate a higher degree of liberalization, mutually beneficial to both parties, than would be possible within the multilateral context." Congress, for its part, has granted the Administration authority to enter into bilateral trade-liberalizing negotiations.

FTA Agreement with Israel

The Trade and Tariff Act of 1984 specifically authorized the President to conclude an FTA agreement with Israel. Formal talks began in January 1984. An agreement was signed in April 1985 and the first stage of liberalization went into effect in September 1985.

The agreement covers both tariff and certain nontariff barriers that exist between the two countries. Although most substantive elements of the agreement address liberalized trade in goods, some relate to trade in services and protection of intellectual property rights.

The U.S.-Israel FTA is the first such agreement reached by the U.S. Government. One motivating factor for negotiating this agreement was Israel's previous entry into a similar agreement with the EC covering trade in manufactured products. By negotiating an FTA with Israel, the United States regained the competitive advantage that U.S. exporters had lost to their European competitors.

FTA Talks with Canada

More trade passes between the United States and Canada than between any two other countries. In 1985, this trade totaled about $120 billion. Canada is this country's largest foreign market, accounting for 22 percent of total merchandise exports. The United States is Canada's largest market, purchasing more than 75 percent of total Canadian exports. The two countries engage in substantial trade in services. In addition, about 20 percent of U.S. direct foreign investment is in Canada.

Over the course of U.S.-Canada relations, special trade pacts have periodically been considered. From 1855 to 1866, trade between the two countries was governed by special treaty. Since 1965, the United States and Canada have had a sectoral agreement covering trade in automobiles. However, more comprehensive and longstanding agreements have eluded American and Canadian negotiators for decades.

Recently, a new effort to reinforce U.S.-Canada economic ties began. On September 26, 1985, the Prime Minister of Canada called for negotiations between the United States and Canada to achieve "the broadest possible package of mutually beneficial reductions in barriers to trade in goods and services." The Administration welcomed this proposal and formally notified Congress in December 1985 of its intent to enter into negotiations under the negotiating authority established in the Trade and Tariff Act of 1984. These negotiations were begun in May 1986.

After consultations with advisory committees representing industry, labor, and agriculture, the Administration developed objectives for the talks. The first objective is the elimination of Canadian tariffs. A second broad goal is the elimination of nontariff barriers to certain U.S. exports. The United States is also interested in eliminating barriers to foreign investment in Canada, liberalizing trade in services, and protecting intellectual property rights.

Canadian objectives include reducing U.S. tariffs and improving access to the government procurement process, both Federal and State, from which Canadian vendors have often been excluded because of various Buy American provisions. Both sides seek a dispute settlement mechanism that could be used to enforce any agreement emerging from these negotiations and to deal with individual disputes in the future.

The mutual economic gains of liberalized trade with Canada are likely to be substantial. The United States would benefit because Canadian tariffs are quite high and hence reduction of these barriers could lead to increased market access for U.S. exporters. Canada would gain from taking advantage of the economies of scale that it could achieve through producing for a market ten times larger than its own. Both countries also stand to gain in many nonquantifiable ways, not the least of which is the reduction of commercial tensions.

Since 1981, the Administration has concluded or examined comprehensive bilateral trading arrangements with several countries. Although such arrangements are better, in general, than sectoral negotiations between countries—and far better than negotiations conducted under threat of retaliation (such as Section 301)—multilateral trade talks are the most efficient and all-encompassing means by which to reduce global trade barriers. Hence, the Administration has placed strong emphasis on a new round of GATT talks.

THE NEW GATT ROUND

An important Administration success in trade policy has been the launching of a new round of talks in GATT to reduce barriers to international trade and to strengthen and improve the global trading system. The announcement of an agreement to begin this new round was made at an international gathering of trade ministers at Punta del Este, Uruguay, on September 20, 1986. Organized discussions began on October 27, 1986; the negotiations are scheduled to continue for 4 years.

The Uruguay Round holds considerable promise for U.S. commercial interests. In addition to traditional areas, new topics that will be considered in the negotiations include trade in services, treatment of foreign investment, and protection of intellectual property rights. The Administration played a key role in ensuring that these issues would be included in the talks.

History of GATT

GATT was created at the end of World War II as one of several international agreements designed to promote world peace and development. It serves both as a forum for trade liberalization talks and international commercial dispute settlement and as a multilateral body that sets rules of conduct in international commerce. Countries that agree to follow GATT rules are said to be contracting parties. As of December 1986, GATT comprised 92 contracting parties, including all developed Western economies. In addition, numerous developing countries, as well as several Eastern-bloc countries, are GATT contracting parties. Together, GATT members account for about 85 percent of international trade.

As a code of commercial conduct, GATT prohibits quantitative restrictions on trade in goods, and the GATT subsidies code outlaws government export subsidies for nonagricultural products. It does permit certain protective measures for balance of payments reasons, to provide temporary relief for local industries in distress (i.e., safeguards protection), or to promote infant industries in developing countries. GATT has procedures for settling disputes arising between members. The dispute settlement process may sometimes be long and problems over compliance with decisions may develop. In the Uruguay Round, the United States hopes to streamline and strengthen the dispute settlement process.

Since 1947, GATT has served as a forum for seven rounds of talks aimed at reducing international barriers to trade. Perhaps the two most successful and well-known are the Kennedy Round of the 1960s and the Tokyo Round of the 1970s. The major achievement of the Kennedy Round was across-the-board tariff cuts, averaging 35 percent, on manufactured products. In the Tokyo Round, manufactured goods tariffs were cut again, this time an average of 31 percent. In addition, codes concerning nontariff barriers, such as government procurement practices and customs valuation procedures, were established.

The operating principle underlying the agreements to cut tariffs is the unconditional most favored nation (MFN) treatment among countries. This notion holds that if a contracting party grants trade concessions to another contracting party or to a nonmember country, it must grant the same concessions to all contracting parties. The economic basis for this principle is sound. Because all countries belonging to GATT are treated alike, and because GATT members account for most of world trade, trade flows will tend to occur along the lines of comparative advantage. Thus, potentially trade-distorting discriminatory treatment is minimized. The MFN rule also protects small countries by preventing big countries from negotiating exclusive mutual concessions. Thus, less developed countries benefit from the full weight of U.S. influence in negotiating trade concessions. The MFN rule is extremely efficient in that it enables countries to avoid the huge administrative costs of conducting the thousands of bilateral trade agreements that are the effective equivalent of a multilateral GATT round.

ADMINISTRATION AIMS IN THE NEW GATT ROUND

Talks in the new round will be conducted on the basis of a comprehensive agenda in two parallel areas, one involving trade in goods and the other trade in services. The negotiations involving trade in goods represent an extension of previous negotiations. Topics to be addressed include tariff and nontariff barriers, trade in tropical and natural resource based products, textiles and clothing, agriculture, and trade-related investment and intellectual property rights issues. In addition, negotiations will seek to strengthen GATT rules related to subsidies, dispute settlement, and safeguards protection. The talks involving trade in services represent the first multilateral negotiations ever undertaken on this issue.

Dispute Settlement

GATT acts as a forum for the settlement of disputes concerning the rules and obligations set out in the GATT agreement. In the first years of GATT, the dispute settlement process was effective in interpreting the rules of GATT and pressing countries to adhere to GATT rules. Beginning about 1960, however, confidence in GATT procedures and compliance with its rules began to wane. The Tokyo Round attempted to tighten the dispute settlement process, but significant problems remain.

Basic weaknesses pervade the settlement process. The fundamental problem is delay. It is not atypical for cases to drag on for several years. Under current arrangements, parties to a dispute can block adoption of settlement recommendations, thereby compounding the problem of unsuccessful resolutions. Furthermore, the process is least effective where GATT rules themselves are weak or ambiguous, as with agriculture.

The United States is strongly committed to repairing and improving the dispute settlement system. The Administration supports new rules and procedures designed to restore international confidence in the system. Included in these rules would be the development of new arrangements to ensure compliance with GATT rules and rulings. New and strengthened trade rules make no sense for the world trading system without effective enforcement.

Trade in Services

From 1950 to 1985, the production of services increased as a share of total U.S. output from 47 to 57 percent. As employment in manufacturing was falling as a share of total employment, employment in the services sector was rising faster than total employment. Today, about 60 percent of American jobs are in the nongovernmental services sector. Between 1950 and 1980, real service exports rose faster than real GNP. Other developed economies have shared similar experiences. In the economies of developed countries, on average, services now account for about 50 percent of value added and constitute approximately 20 percent of international trade.

Despite the growing importance of the production and trade of services in the U.S. economy and the economies of other developed countries, little has been done to limit government policies that restrict or distort trade in services. A key element of the Ministerial Declaration at Punta del Este was the establishment of a negotiating group on services: the object is to fashion a legal framework to reduce barriers to and govern trade in services.

The agreement to consider trade in services required considerable effort by U.S. negotiators. Opposition to negotiations over services was largely related to issues of national sovereignty. Several countries remain concerned about their ability, in the face of foreign competition, to develop domestic services industries in such sectors as telecommunications and insurance. Moreover, these countries fear that without domestically supplied services they will be at risk. These familiar mercantilist arguments have no more validity in this instance than they do with trade in goods.

The Administration has stated objectives regarding talks in services. It would like to see a legal framework that consists of at least the following elements: transparency of restrictions, so that all parties to the agreement are aware of laws and regulations in place to protect local industry; open regulatory procedures; limitations on the activities of local monopolies; a dispute settlement process; and a commitment to pursue liberalization in future talks.

Negotiators will still face the appropriate definition of the service sectors. The Administration seeks a framework covering activities readily traded internationally, including but not limited to, insurance, telecommunications, data processing, shipping, aviation, construction, and engineering. A second and potentially more difficult problem lies with the measurement of production and trade in services. For most countries, adequate data on trade in services do not exist. Developing better measures of activity in the services area could be an important by-product of the Uruguay Round.

Investment

The international diversification of capital through direct foreign investment raises economic welfare around the world. In countries that receive the investment, standards of living rise because real wages rise, resources are used more efficiently, and technology levels increase. Countries that export financial capital under free market conditions also benefit because they allocate their capital to projects that earn higher rates of return than could have been earned otherwise. Thus, the international flow of capital between countries is mutually beneficial, in a fashion similar to the free exchange of goods.

Governments that unnecessarily restrict the location and operation of foreign capital lower the welfare of their citizens by lowering their incomes. All investment policies that distort or impede trade alter the pattern of trade away from that dictated by comparative advantage and lower the economic well-being of both the countries that impose the laws and the rest of the world.

The United States has traditionally welcomed foreign investment and only limits it in a few sensitive areas, generally on essential national security grounds. Many countries have established free-trade zones and offer incentives to potential foreign investors. In effect, they subsidize direct foreign investment in their countries and thereby distort capital and trade flows. Typical trade-distorting incentives include performance requirements, which establish minimum export levels expected of the foreign corporation. Laws that require the use of domestic parts or labor, exchange controls, controls on technology transfer, local equity requirements, and regulations on licensing, research, and development are other common restrictions. In the Uruguay Round, the United States will seek to develop effective multilateral disciplines over the whole range of trade-distorting investment measures.

Intellectual Property Rights

Economic growth is spurred through the inventive, innovative, and creative activities of individuals and companies. When the resulting ideas are disseminated widely, the ideas of one person often contribute to the creative activities of others. In order to encourage this process, countries establish systems of laws to promote and protect inventions, literary and artistic works, trademarks, and other forms of intellectual property. These patent, copyright, and trademark laws provide incentives to create intellectual property by granting exclusive rights to their creators. For instance, patents afford inventors time to recover their investment and the costs of creating and marketing inventions. Copyrights give authors control for a period of time over the reproduction, dissemination, and public performance of their works. Trademarks assure consumers about product characteristics such as quality.

Different countries provide different levels of intellectual property protection. The United States seeks comprehensive protection for all forms of intellectual property. Certain other nations afford little protection to foreign holders of intellectual property or limit protection in several important areas. Some countries provide only minimal protection and use compulsory licensing to acquire foreign technology or reproduce copyrighted works. This problem is becoming increasingly important as U.S. producers expand the marketing of items such as computer software and pharmaceutical products abroad.

The Administration hopes the conclusion of an enforceable multilateral trade agreement will eliminate trade-distorting practices arising from inadequate protection of intellectual property. Part of this agreement would seek the adoption by GATT members of minimum standards of protection contained in existing international conventions where the United States perceives standards to be adequate. In areas where no convention exists or the standards under existing conventions are considered inadequate, the Administration will seek greater protection.

Agriculture

Trade policies affecting agricultural products are perhaps the most difficult and contentious issues awaiting the new round. Virtually all countries distort their trade in agriculture through tariffs, quotas, and export subsidies.

Industrialized countries adopt domestic agricultural policies aimed at raising farm income. Instead of providing farmers with income transfers decoupled from production, governments employ price-distorting policies that encourage agricultural production. In order to limit the cost of these programs, governments typically will also impose import tariffs or nontariff barriers, such as quotas or variable levies, and may subsidize the export of unwanted surpluses of domestic production. Thus, a direct relationship exists between domestic agricultural policies and the distortion of agricultural trade.

The cost of these policies, to both consumers and taxpayers, is exceedingly high. Consumers are often forced by their governments to pay several times more than world price for the same product. For instance, the price of sugar in the United States has recently been 300 percent above the world price. Japanese consumers currently pay eight times the world price for rice. Beef prices in the EC are currently more than twice world prices.

The budget costs are also enormous and are worsening. Trade in agricultural products should be determined by comparative advantage; instead it is determined by which government is willing to tax its own citizens the most in order to subsidize domestic producers. This situation has prompted competitive, countersubsidy trade wars among the industrial countries in an effort to capture world markets. It is not surprising that the predominate source of all GATT dispute settlement cases has been agricultural trade. The same is true for Section 301 cases. Current rules on agricultural trade are weak, vague, and easily circumvented. Practices are tolerated that GATT has elsewhere forbidden.

The keen interest of the United States in negotiating tougher rules to govern agricultural trade stems in part from its role as a major exporter of agricultural products. In 1985, U.S. farm exports totaled $29.6 billion, accounting for 13.9 percent of U.S. merchandise exports. U.S. agricultural exports have been declining rapidly, however. In 1981, the peak year for U.S. trade in this area, exports totaled $43.8 billion, 18.7 percent of all U.S. merchandise exports. Some of the loss of export markets can be attributed to the strength of the dollar. In addition, recent technological advances in agricultural production have allowed countries that were only recently net importers of agricultural products to increase their production levels and become net exporters. High support prices in other countries have had similar effects. For example, in the mid-1970s, the EC was a net importer of 25 million tons of grains—20 percent of world trade in these products. By 1985, largely because of its internal farm policies, the EC had become a net exporter of 16 million tons, a swing of 41 million tons in the world market in a decade.

Some of the lost market for U.S. products has been caused by the production and export subsidy practices of certain competing nations. In order to stave off this reduction in markets, the United States has resorted to subsidizing exports. The Uruguay Round offers the opportunity to end this costly and counterproductive subsidy war. Stable, undistorted world agricultural markets offer the best opportunity for America's farmers to export their products.

The United States seeks to improve the climate of international agricultural markets by bringing them under effective and enforceable multilateral rules. The United States hopes the Uruguay Round will make progress in reducing import restrictions on agricultural products, in outlawing export subsidies, and in reducing other forms of market barriers in developed and developing countries alike. Clearly, the key to achieving fundamental reform in this area will be for countries to agree to eliminate distorting domestic agricultural policies.

CONCLUSION

The Administration seeks to open foreign markets to U.S. exporters. Administration actions include the increased use of Section 301, which attacks specific foreign trade practices; the initiation of negotiations leading to bilateral free-trade areas between the United States and several important trading partners; and the achievement of a new round of multilateral trade liberalization talks in GATT.

The Administration's approach stands in sharp contrast to efforts proposed by some to attack the trade imbalance with protectionist policies. Instead of bilateral market opening, these forces recommend bilateral restrictions. Instead of multilateral trade liberalization, they call for general import surcharges. Calls for protection ignore its cost to consumers, its deadening effect on the efficiency of U.S. industry and the global economy, its invitation to counter-retaliation that stings U.S. exporters, and the inspiration it gives to other industries to seek government assistance in the guise of import relief. Raising trade barriers would only reduce the opportunities to open world markets for American products. Through its efforts to contain and reverse the growth of protectionism both at home and abroad, the Administration hopes to ensure that the postwar expansion continues in the years to come.

CHAPTER 5

Toward Agricultural Policy Reform

U.S. AGRICULTURAL PROGRAMS have resulted in enormous budgetary costs, benefits that do not reach those most in need, huge surpluses of farm products, major trade disputes with other countries, and great harm to well-functioning international markets. Programs instituted at the Federal level have distorted economic incentives sufficiently to create serious long-term problems. Programs for some commodities have imposed substantial losses on consumers. Chronic surpluses of major commodities exist throughout the world, largely because of high U.S. Government target prices and heavy subsidization of agricultural production by most other developed countries.

Despite the massive taxpayer and consumer costs of current programs, the U.S. agricultural sector faces its most severe economic crisis since the 1930s. Instability within the sector continues, with little improvement apparent in the financial condition of many family farms and rural banks. Soil erosion and the pollution of surface and groundwater with toxic waste continue with only moderate signs of relief.

Agricultural policies have become contentious issues of immense importance to all countries. The shift in U.S. agriculture from its prosperous state in the inflationary period of the 1970s to its unsettled existence in the 1980s is linked to events abroad and to the policies pursued in both the agricultural sector and the U.S. economy in general. For these reasons, this chapter focuses on the current state of U.S. and world agriculture, how the Nation arrived at this state, and what public policies would foster a healthy U.S. farm economy.

CHANGES IN U.S. AGRICULTURE

Over much of the 20th century, agriculture has been one of the most innovative and productive sectors of the U.S. economy. In the 1930s, no perceptible difference in crop yields was visible among the United States, England, India, and Argentina. In the subsequent 50 years, however, U.S. agricultural productivity has increased dramatically. It has grown faster than other industries and, until the mid-1970s, faster than agricultural productivity in other countries.

Farmers in the United States represent less than 3 percent of the civilian labor force, but they produce enough food to feed the entire domestic population, while maintaining the capacity to export large quantities to the rest of the world. Farming operations represent only one component of a total food and fiber system that embraces all activities from the provision of farm inputs through commodity production and on to final consumption. Defined in this fashion, the food and fiber system accounts for approximately one-fifth of the Nation's gross national product (GNP) and slightly more than one-fifth of total labor force employment.

Factors that affect U.S. agriculture can be categorized as follows: macroeconomic, financial, and exchange-rate factors; demand and supply; and agricultural and food public policies. The interaction of these three forces, along with the inherent instability of the U.S. agricultural sector, explain the changes in the U.S. food and fiber system.

During the 1970s, the combination of these forces had the effect of pushing agricultural prices and incomes to record levels. In the 1972–73 period, the fall in the U.S. dollar, the emergence of a well-integrated international capital market to finance trade, the lack of supply response in many foreign countries due to trade barriers, and the growth in real income around most of the world boosted demand sharply for U.S. farm output. The elimination of the huge U.S. governmental stocks in 1972 that had accumulated during the 1960s made the system more vulnerable to shocks.

Throughout the 1970s, supply and demand worked both to expand world agricultural trade and to increase the U.S. share in trade at an unprecedented pace. Foreign food consumption grew by 34 million tons per year while the annual average increase in foreign grain production was only 24 million tons. For the decade as a whole, world trade expanded fourfold while U.S. exports increased sixfold. By 1980, more than one-third of U.S. cropland was committed to producing for export, while 2 out of every 5 tons of farm products traded were produced in the United States.

Rapid inflation in 1973–74 and again in 1978–80 boosted nominal agricultural prices and helped drive up the price of agricultural land. Higher land prices made additional borrowing more attractive, which was further stimulated during much of this period by negative real interest rates.

In the early 1980s, the forces that stimulated the agricultural prosperity of the 1970s reversed direction. The need to control inflation led to a mix of U.S. fiscal and monetary policies that drove ex post real interest rates to postwar highs. The rise in the value of the dollar in the first half of the 1980s, the worldwide recession that reduced demand for U.S. exports, the increase in supplies of agricultural products from other countries, and record U.S. crops in 1981, 1982, and 1985 all combined to reduce world prices and U.S. export sales. The Food and Agricultural Act of 1981 made it more profitable for U.S. farmers to forfeit their output to the Commodity Credit Corporation (CCC) at rigidly fixed loan rates than to export at lower world prices. This imbalance led to larger and larger stocks and, in turn, to larger and larger acreage reduction programs, which culminated in 1983 with more cropland idled in the United States than all of Western Europe planted to crops.

The decline in the growth rate of worldwide consumption in the 1980s was attributable to the low rate of income growth in much of the world and, in many countries, the high interest costs of large external debt. The rate of growth of consumption decreased from 34 million tons of grain to 19 million a year. With foreign grain output increasing 29 million tons per year during the 1980s, the 10-million-ton yearly increase in net foreign grain imports of the 1970s was replaced by a 10-million-ton annual decline during the 1980s.

Throughout the developed world, increasing self-sufficiency has severely contracted available export markets. For example, during the 1970s, the European Community (EC) was a large net importer of grains. In particular, in the mid-1970s, the EC imported about 25 million tons of grain, a fifth of world trade. By 1985, the EC was exporting 16 million tons. That change reduced the annual size of the world market available to the United States by 41 million tons a year in a single decade.

With falling rates of return to agricultural production during the 1980s and the increasing attractiveness of financial instruments, the value of agricultural assets, particularly land, dropped sharply. The change in asset values resulted in a loss of owners' equity since 1981 of almost $300 billion. Owners' equity can no longer shield many farmers from their debt repayment problems, resulting in an increased frequency of farmer bankruptcies and rural bank failures.

MARKET, GOVERNMENT, AND RESOURCE RISK

The special characteristics of U.S. agriculture include inherent instability and uncertainty because of unpredictable weather patterns, the lack of complete insurance markets for sharing risk, the immobility of certain resources in farming, and particular environmental effects of farming on the Nation's resource base.

Some human resources are trapped in farming with few off-farm rural employment opportunities. Despite falling commodity prices and widespread overcapacity, many farmers are reluctant to enter other occupations. This reluctance is reinforced by government policies that encourage an overcommitment of resources to the agricultural sector. However, the immobility of farmers has declined as a distinguishing characteristic of U.S. agriculture as farms have grown larger and have become more integrated into the rest of the economy.

Macroeconomic developments induce increased volatility of commodity prices. Because agricultural prices are generally more flexible than nonagricultural prices—due to product homogeneity, modern integrated markets, biological time lags, and shorter contracts—monetary shocks cause agricultural prices to respond sharply while leaving other prices relatively unchanged. This phenomenon helped fuel the explosion of agricultural prices in the 1970s and their dramatic fall in the early 1980s.

Public policies have been designed to reduce the risk associated with high variations in commodity prices and production in the agricultural sector. Farm policies, such as price stabilization schemes and crop insurance, are supposed to help the agricultural sector cope with the capricious nature of its physical and economic environment. When the government guarantees farmers a certain price, for instance, it absorbs risk and eliminates some of the uncertainty faced by many in the agricultural sector.

While government policies have absorbed risk in many instances, government itself has also created risks by contributing to commodity market instability. The Food and Agriculture Act of 1977 changed commodity programs to permit a wider fluctuation in prices. The export embargo of 1980, variations on the rules of the Farm-Owned Reserve program since 1980, the payment-in-kind program of 1983, and the issuance of generic certificates of 1986, to name but a few large government agricultural programs, make it clear that policy uncertainty can be a major contributor to private commodity market instability. In addition, the mere existence of governments is one reason why private stockholders may not store commodities for extreme contingencies and, thus, provide needed price stabilization.

If complete risk markets existed, the inherent instability and uncertainty within the agricultural sector would not be sufficient justification for public policy. One reason more comprehensive risk markets do not exist within the agricultural sector is because of heavy government involvement. So much of the risk is borne by the public sector that little incentive exists for the emergence of private institutions to manage inherent instabilities and risk. For example, the introduction of commodity futures options markets has provided an important mechanism for hedging risk. Options markets allow agricultural producers, merchants, and processors to take advantage of favorable prices while limiting the risk associated with harmful price movements. These risk-transfer mechanisms offer distinct advantages to producers relative to traditional futures markets because of the avoidance of margin calls and their associated demands on liquidity. However, because of government policy most farmers have little if any incentive to use these options markets.

Government policy, while perhaps achieving its direct goal, may have side effects and consequences that are unanticipated and unintended. Once it is known that the government intends to redistribute income from one group to another, specific economic groups lobby the government to gain these lucrative transfers for themselves. If, for instance, the government has reduced the downside risk in producing certain commodities, farmers will specialize in these commodities because they offer a less variable rate of return than was previously the case. Farmers will then also have an economic incentive to push for the political maintenance of that government program from which they benefit.

Environmental effects of farming activities justify some corrective public policy. Some lands currently under cultivation are highly erodible. Current irrigation levels with average precipitation result in "mining" of more than 22 million acre feet of water from aquifers in the Western United States. Nationally, nearly a quarter of the groundwater used by agriculture is not replenished. Groundwater contamination from agricultural as well as nonagricultural sources has also become serious in many parts of the country. Western irrigation practices have raised groundwater salinity. Perhaps one-quarter of the lands currently under irrigation in the West depend heavily on nonrenewable water supplies, and the productivity of several million additional acres is threatened by rising salt levels. Excessive application of fertilizer, pesticides, and other chemical uses in agricultural production generate much of these off-farm environmental risks and adversely affect the quality of groundwater and surface water.

THE STRUCTURE OF AMERICAN FARMS

Today, slightly more than 2 million farms in this country have gross sales exceeding $1,000, a third of the number 50 years ago. Although the rate of decline has slowed, fewer but bigger farms are expected in the future. Over the past 50 years, average farm size has increased in terms of sales, acreage, and the real value of assets.

The population of farms can be divided into three groups. First, a large number (1.6 million) of farms have gross sales under $40,000 per year. More than one-third of all farms have sales less than $5,000, and three-fifths have sales less than $20,000. The farms with sales under $40,000 per year account for 72 percent of all farms, but only generate 10.3 percent of gross farm income. Net farm income is usually a minor component of average income for these farms—in fact, averaging a $1,635 loss in 1985. But off-farm income averaged $20,740 per farm. These farms are minimally affected by agricultural policies and, in fact, receive only 9.5 percent of government payments.

A second class of farms have sales from $40,000 to $250,000, constitute about a fourth of all farms (544,000), and account for 40.9 percent of gross farm income. For these enterprises, farming is the major occupation and livelihood of their owners, and family members provide most of the labor. Off-farm income amounts to 55 percent of net farm income, and they receive 58.6 percent of direct government assistance to agriculture.

Finally, a small number of farms (93,000, or only 4.1 percent of all farms) have gross sales of more than $250,000 and account for 48.8 percent of gross farm income. Off-farm income constituted only 10.2 percent of net farm income for this group. The largest farms gain disproportionately from government support. Those with sales over $250,000 receive 32 percent of government payments, while those with sales over $500,000, representing 1.2 percent of all farms, receive 13.3 percent of such assistance.

In terms of income and assets, farming is not as badly off as is sometimes popularly portrayed. Individual hardship cases do indeed exist. Compared with the past, however, poverty or low farm income is not as important a rationale for farm policy as it once was. Average net cash income per farm was $11,745 in 1960, or 58 percent of median family income, but, in 1985, stood at $19,256, 69 percent of median family income (all figures in 1985 dollars). In 1986, government payments were high enough to pay an equivalent of $42,000 to each U.S. commercial farm (those with sales above $100,000) while U.S. median family income was $27,735.

The current financial stress suffered by farmers has focused attention on the debt/asset position of farming as a whole. The agricultural sector had $866.8 billion worth of assets, primarily in land, and $204.9 billion of debt as of December 31, 1985. Because of the dramatic declines in land values and the large accumulation of debt during the 1970s, the debt relative to net farm income currently is almost twice as high as 15 years ago.

CURRENT AGRICULTURAL POLICY: PROBLEMS AND OUTLOOK

Public policy has played a major and, in some instances, dominant role in U.S. agriculture over the past 50 years. The Food Security Act of 1985 is the most recent omnibus farm law that provides the basic authority for implementing U.S. food and agricultural programs. Like the 1981 act, the 1985 legislation provides income support to farmers through deficiency payments. Deficiency payments are computed as the difference between the target price, which is set by law, and the higher of the basic loan rate or the average price received by farmers over the first 5 months of the marketing year. Loan rates for each commodity are announced by the Secretary of Agriculture before the commencement of the marketing year. The Secretary has some discretion in the case of feedgrains and wheat to lower the loan level up to 20 percent below the basic loan rate. For soybeans, the loan level can be lowered no more than 5 percent. For cotton and rice, the effective loan is set at world market prices. As a result, cotton and rice farmers participating in government programs can first pledge their output as collateral for a loan at the basic rate, and at maturity repay the loan at the then world market price if it is lower than the basic rate.

The payment base for each farmer is determined by base acreage and "program" yield (based on the individual's or county's past yields), adjusted for any acreage reduction programs. For the 1987 crop year, deficiency payments are limited to $50,000 and loan deficiency payments, based on the difference between the basic loan rate and the Secretary of Agriculture's announced loan rate, are limited to $200,000. For cotton and rice, the $200,000 limit pertains to the difference between the basic loan and the marketing loan repayment rate. Chart 5-1 shows the recent history and current legislative provisions for target prices, loan rates, and market prices for corn.

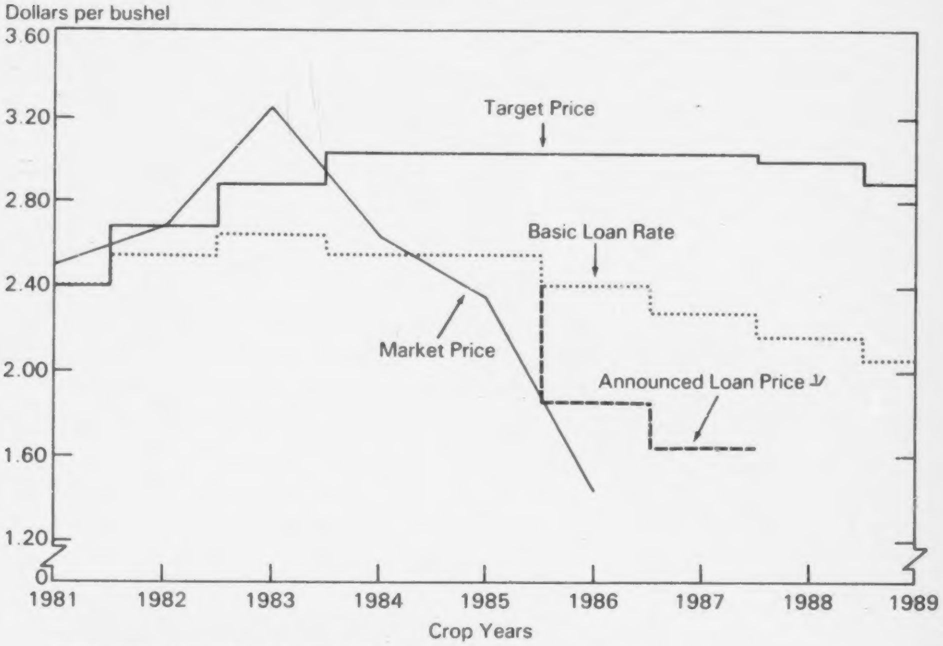
As with previous legislation, the 1985 act requires acreage reduction programs in an attempt to manage total market supply. In essence, the government induces farmers to participate voluntarily by offering subsidies in the form of deficiency payments. In return, the government asks the farmer to idle some portion of the farm's land. By idling land, the government hopes to reduce supply to markets, thereby raising market prices and indirectly lowering the amount of deficiency payments.

Some features of the 1985 act allow market discipline to operate while other features have moved U.S. agriculture farther away from the free market. The former features include the dramatic reduction in operative loan rates for several important commodities. In the case of cotton and rice, the introduction of the marketing loans has eliminated price supports. This particular feature, however, has increased significantly the cost of these commodity programs to the government.

Moreover, the use of generic commodity certificates has reduced the effectiveness of the loan rate as a price floor for corn and wheat.

Chart 5-1

Corn: Target Price, Loan Rate, and Market Price



1/Set by the Secretary of Agriculture within mandated limits.
Source: Department of Agriculture.

The negotiable generic commodity certificate allows the holder of the certificate to take ownership within a specified period of time, usually 9 months, of most commodities that are held in CCC stocks. The certificates may also be exchanged for cash or used to redeem outstanding commodity loans. The certificates are specified in dollars and can be exchanged for a quantity of the commodity based on local market prices. Thus, CCC stocks can be placed on the market even when prices are below loan levels.

The reduction in price supports has made the United States more competitive internationally and, in the case of some commodities, lowered prices for U.S. consumers. Other features of the act also gradually lower direct income support for some commodities. In particular, the act allows a producer to receive deficiency payments on 92 percent of permitted acreage if 50 percent or more of eligible land is planted. In this instance, permitted acreage is defined as the acreage that remains after land has been idled under an acreage reduction program.

The 50–92 provision provides a partial decoupling of the link between deficiency payments and planted acreage. Because farmers can collect payments on 92 percent of the permitted acreage, the only reason to plant more than 50 percent is if the market price or the loan rate exceeds variable production costs. However, if farmers choose to plant less than 92 percent of eligible acreage, they cannot grow other crops on the land that is idled. Very little use was made of the 50–92 provision during the 1986 crop year, in part because of the large setup costs associated with planting any portion of a farmer's acreage base.

Another instance of partial decoupling is the freezing of historical program yields in the determination of deficiency payments. This change means that farmers no longer have an incentive to manipulate their yields in current and future years in order to increase the level of production on which deficiency payments are determined.

Between 1981 and 1985, the Federal Government spent about $60 billion on farm price and income-support programs. The original estimate for farm program outlays for 1986 was significantly below the actual cost of $25.9 billion associated with CCC activities to support the agricultural sector. Other related programs also support agricultural production and rural America; in 1986 the outlays for these programs amounted to approximately $14 billion. The largest single item was Farmer Home Administration outlays at $8 billion.

Other features of current programs act directly or indirectly on the demand for farm output. Major trade programs include amendments to the Agricultural Trade Development and Assistance Act of 1954 (Public Law 480), short- and intermediate-term trade credit guarantees, targeted export assistance, and the export enhancement program. In fiscal 1986, the value of commodities exported under Public Law 480 (both Titles I and II) amounted to $1.4 billion; $2.5 billion of export guarantees were provided; and the export enhancement program that subsidizes U.S. agricultural sales abroad cost the U.S. Government nearly $0.75 billion. In the domestic market, food assistance programs cost $20.2 billion in fiscal 1986; the bulk of this expenditure supports the food stamp program and the women, infants, and children feeding program.

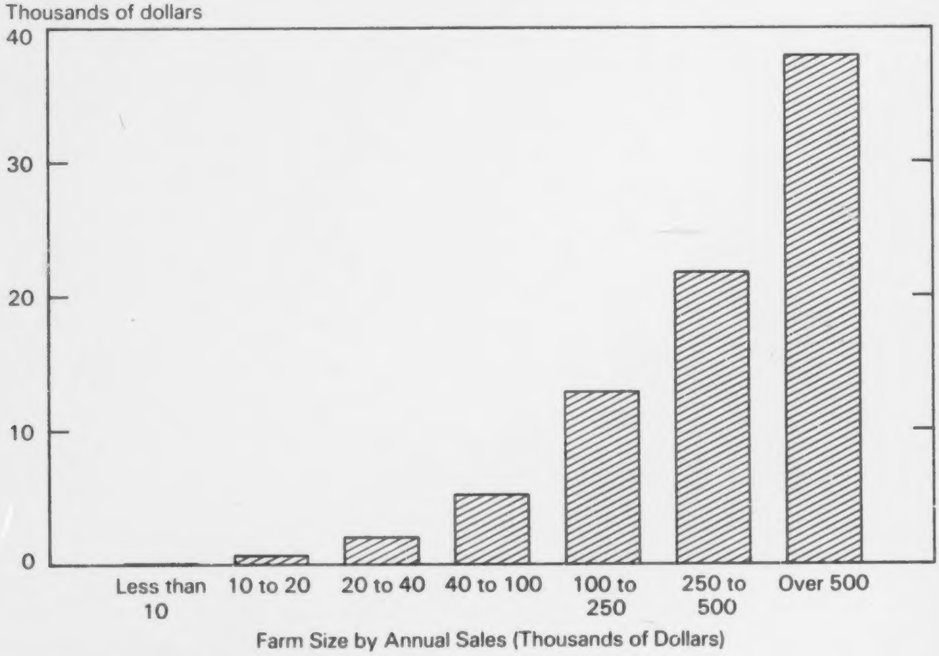
Target prices, the remaining partial coupling of deficiency payments to production, and the implied export subsidies have continued to cause distortions in economic incentives and further misallocations of economic resources. Moreover, the 1985 act has continued to impose waste and economic losses on the American economy in other commodity programs, especially sugar and dairy. Over much of the 1980s, taxpayer costs of government programs designed to support U.S. agriculture have been at record levels. In 1980, government outlays for corn, wheat, and rice represented less than 7 percent of the crop value. This share grew to about 57 percent by 1986.

Given the current level of the Federal budget deficit, growth in the outlays for agriculture simply cannot be sustained. Unfortunately, program expenditures are not expected to improve much during fiscal 1987 with CCC outlays for direct income and price supports projected to be between $23 billion and $28 billion.

Furthermore, the distribution of program benefits is viewed by many as inequitable. The benefits provide little assistance to those suffering the greatest financial hardship. As is shown in Chart 5-2, government payments are concentrated among the larger farming operations, with the average payment to all farmers having annual sales exceeding $500,000 per year being almost $40,000. Since many large farms do not produce commodities eligible for government programs, participating farms receive considerably more than this $40,000.

Chart 5-2

Average Direct Government Payments per Farm by Sales Class, 1985



Source: Department of Agriculture.

The commodity programs with the largest outlays include corn, wheat, cotton, and rice. Table 5-1 shows how much is going to the growers of various crops and what proportion of farmers are receiving large payments. One large California cotton producer is expected to receive more than $12 million in CCC payments; the crown prince of Liechtenstein as a partner on a Texas rice farm received a subsidy of more than $2 million; and 112 dairy producers in California, Florida, Idaho, Texas, and Arizona received payments exceeding $1 million each under the dairy termination program.

TABLE 5-1.—*Direct government payments for 1986 agricultural programs*

Program	Payments		Payees receiving over $50,000	
	Total (millions of dollars)	Average payment to all payees	Portion of all payees	Portion received of total payments
			Percent	
Corn	6,147	$8,000	6	24
Wheat	3,454	6,000	1	9
Cotton	1,523	14,000	12	55
Rice	814	25,000	20	61

Note.—Data are estimates for 1986 crop year.
Source: Office of Management and Budget.

FINANCIAL STRESS AND ECONOMIC WASTE

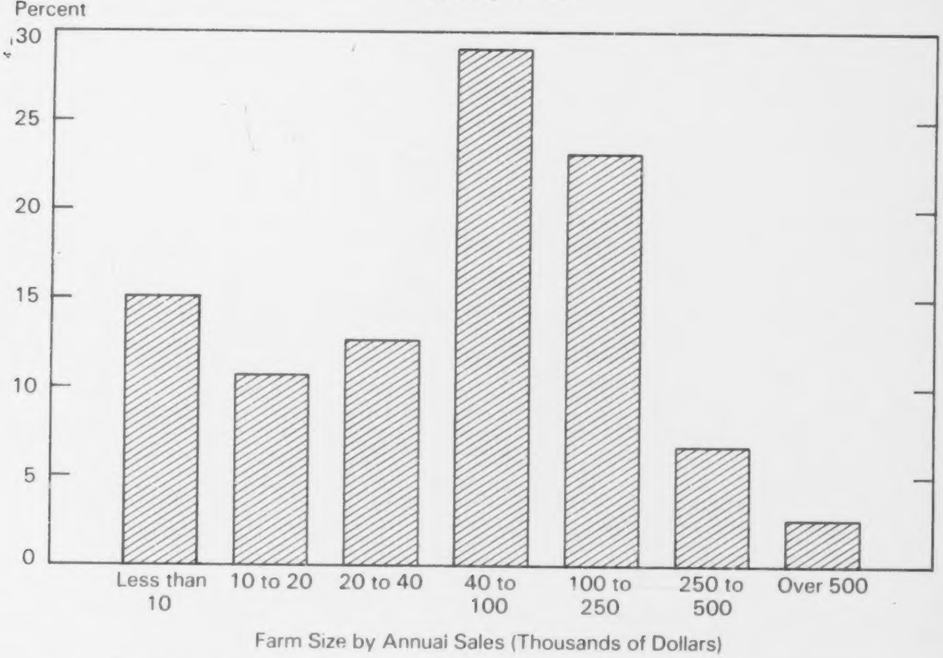
Financial stress in U.S. agriculture continues to be a serious problem. Approximately 11 percent of all farms were in serious trouble at the beginning of 1986. The Department of Agriculture considers a farm to be financially distressed if its debt/asset ratio exceeds .40 and it cannot generate sufficient cash to pay its bills. A comparison of Chart 5-3 with Chart 5-2 shows that much of the money spent on Federal agricultural programs does not go to distressed farmers, partly because many farms are not eligible for commodity programs. Even though the participation rate among farms eligible for commodity programs was very high in 1986, only about 30 percent of all farms had access to direct government payments. Financial stress is concentrated among family-size commercial farms; farms with sales between $40,000 and $250,000 represent about 25 percent of the total number of farms, but include in their numbers more than 50 percent of all financially stressed farms.

The benefits received by farmers include not only the government outlays for agricultural programs, but also the gains from higher prices that are the result of government policies. Such policies, even if they do not entail government outlays, impose extra costs on consumers and taxpayers that exceed the amount of income transferred.

Chart 5-3

Distribution of Financially Distressed Farms by Sales Class

January 1, 1986



Note.—Financially distressed farms are defined as those with debt/asset ratio over 40 percent and negative cash flow.

Source: Department of Agriculture.

The higher prices result from price supports, acreage reduction programs, or trade barriers.

The benefits to farms are directly tied to output. Taxpayer transfers are specifically tied to the acreage base of each farmer. The larger the stream of future subsidies, the higher the value of land. This feature of government programs increases the cost of production and makes the United States less competitive relative to other exporting countries.

Table 5-2 summarizes estimates of the consumer and taxpayer costs and producer gains from the major commodity programs. In most instances, economic resources are wasted because producer gains are less than the sum of losses to consumers and taxpayers. Most of these estimates assume U.S. policies do not affect world prices, when in fact the United States is an influential agricultural producer and consumer whose public policies can affect world prices. For example, U.S. sugar policies have such a large influence on world prices that Table 5-2 includes estimates of the costs and gains, taking account of such changes. If U.S. sugar prices were determined by a free market, the world price would rise; thus, producer gains and consumer losses would be lower because the gap between the internal and world price would be narrower.

TABLE 5–2.—*Annual gains and losses from income-support programs under the 1985 Food Security Act and trade restrictions*

[Billions of dollars]

Commodity	Consumer loss	Taxpayer cost[1]	Producer gain	Net loss
Corn	0.5 - 1.1	10.5	10.4 - 10.9	0.6 - 0.7
Sugar I[3]	1.8 - 2.5	0	1.5 - 1.7	.3 - .7
Sugar II[3]	1.1 - 1.8	0	1.0 - 1.4	.1 - .4
Milk	1.6 - 3.1	1.0	1.5 - 2.4	1.1 - 1.7
Cotton	(2)	2.1	1.2 - 1.6	.5 - .9
Wheat	.1 - .3	4.7	3.3 - 3.6	1.4 - 1.5
Rice	.02 - .06	1.1	.8 - 1.1	.06 - .32
Peanuts	.2 - .4	0	.15 - .40	.0 - .05
Tobacco	.4 - .7	.1	.1 - .2	.4 - .6

[1] Includes CCC expenses after cost recovery.

[2] Less than $50 million.

[3] Case I assumes U.S. policies do not affect world sugar prices. Case II takes into account the fact that U.S. policies reduce world sugar prices. The value of sugar import restrictions to those exporters who have access to the U.S. market (that is, value of quota rents) is $250 million.

Note.—All figures reflect Gramm-Rudman-Hollings.

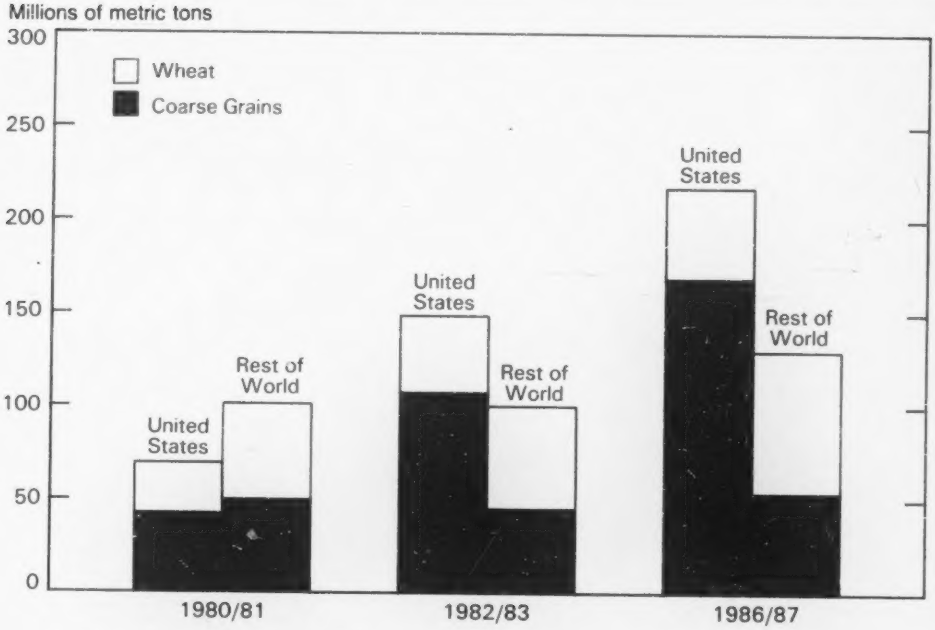
Source: Compiled by the Council of Economic Advisers from various sources.

Given the incentives provided by agricultural policy in the United States, it is no surprise that surpluses have become burdensome. At the beginning of the 1981–82 crop year, the world's wheat exporters held 49.5 million metric tons of wheat stocks, of which the United States held more than half. At the end of the 1985–86 year, stocks of the major world wheat exporters were estimated to be 83.2 million tons, of which the United States held 62 percent (Chart 5–4) or the equivalent of about 2 years of domestic consumption. Of the amount stored in the United States, most was held by the government (32.6 million tons). For coarse grains, at the end of 1986–87, it is estimated that U.S. stocks, which will be about 76 percent of world stocks, will represent approximately 1 year's domestic consumption and almost four times the amount of U.S. exports of coarse grains in any given year.

The overcapacity that exists and the chronic surpluses of major commodities continue to be sources of bad news for the future of American agriculture. During the 1980s, world stocks of sugar have risen 45 percent; world butter stocks have soared to a massive 2.1 million metric tons, which is approximately 33 percent of annual consumption, and prices have fallen by 50 percent; stocks of beef within the EC have risen to more than 30 percent of total world trade.

Chart 5-4

Carryover Stocks of Coarse Grains and Wheat



Note.—Data are for crop years; 1986/87 data are preliminary estimates.

Source: Department of Agriculture.

Within the United States, overcapacity is in the neighborhood of one-third of recent annual production of corn, wheat, and rice; and in 1985 overcapacity in the dairy industry was approximately 10 percent of total milk production.

PROMISING DEVELOPMENTS

Several developments engender hope that the current overcapacity in the U.S. agricultural sector may begin to ease. The Tax Reform Act of 1986 eliminated or severely curtailed many of the tax shelter features that led to an overcommitment of resources in agriculture. Special tax rates for capital gains have been eliminated, so the capital gain benefits for breeding and dairy livestock no longer will apply. Opportunities provided by cash accounting have also been restricted. Farmers will be able to deduct the costs of prepaid feed, seed, fertilizer, and similar supplies when they are purchased only to the extent that they are 50 percent or less of total farm expenses; those exceeding 50 percent will have to be deducted when used. In addition, only those involved in farming on a regular, continuous, and substantial basis can now use farm losses to offset wage and salary income.

Growth in the use of many inputs has fallen significantly. Investment in machinery and structures has been below replacement levels since 1981 and thus should act to curtail capacity. The demand for new credit, which already has declined approximately 20 percent, should continue to slow as farmers pursue cost-cutting strategies. The dramatic drop in energy prices will offer farmers large savings in production costs. Furthermore, the changes in how government deficiency payments are computed should lead to reduced output.

The declines in interest and exchange rates have begun to improve the outlook for the U.S. agricultural sector. Because farming is extremely capital intensive and debt-to-asset ratios have risen steeply, movements in real interest rates have significant effects on the cost structure facing agricultural production. In 1985, interest accounted for 16 percent of farm production expenses, excluding depreciation. Storable commodity prices are particularly sensitive to changes in interest rates; for nonstorable commodities (for example, cattle and hogs), breeding stocks are interest-rate sensitive.

The downturn in outstanding farm debt that began in 1983 continued through 1986. The large drop in interest rates during 1986 ultimately should offer improved returns to farming by eliminating several billion dollars of interest expense. The fall in production expenses is expected to boost net cash income about 14 percent in 1987 over 1986.

From a longer term perspective, existing overcapacity in the U.S. agricultural sector today can be altered by increases in demand or by the introduction of new cost-reducing technologies. Unfortunately, relief from current surplus conditions is unlikely to come from a growth in U.S. demand for food. Over the past quarter of a century, there has been no appreciable growth in per capita U.S. food consumption. On the other hand, U.S. agricultural productivity has been growing at a significant rate. The divergence between these two trends highlights the need to find markets for U.S. agricultural output beyond U.S. borders, or else experience further shrinkage of the farm sector. Fortunately, the rather steady growth in foreign food markets since 1960 provides a major outlet for U.S. excess supply.

One major source of world trade growth is the developing countries. Developing countries' effective demand for food has significantly outpaced their growth in food production. The result is large increases in trade; for example, during the period 1961–80, the 29 developing countries with the fastest growth rates in staple food production increased net imports of staple foods 3½-fold. Between 1970 and 1980, less developed country (LDC) net grain imports increased from 18 million to 53 million tons. Unlike the EC and centrally planned countries, LDC imports have continued to grow in the

1980s, reaching 68 million tons in 1984. Even though growth has stagnated over the past few years, the developing countries still remain the major potential growth market for U.S. exports.

Foreign economic growth rates are likely to increase over the next several years because of improved macroeconomic and financial conditions. Expanding incomes and global trade, declining inflation, and lower interest rates are providing the basis for recovery in purchasing power. Moreover, the world will add another 80 million people per year in the late 1980s. As a result, the growth rate of foreign demand for agricultural products could more than double the early 1980s' rate of 1 to 1.5 percent per year.

To enhance their rate of growth, LDCs must be encouraged to implement effective strategies, including those that improve the performance of their own agricultural sectors. Recent studies have demonstrated that such policies do not lead to reduced export demand for U.S. agricultural products. On the contrary, by fueling domestic growth and increasing rural income, many developing countries become better customers for some agricultural products that only the United States and other developed countries can provide.

Another promising development is on the emerging technology front. The United States is at the threshold of a revolution in biotechnology and genetic engineering. This revolution has the potential to increase agricultural productivity and reduce unit cost of production to levels that will significantly enhance U.S. trade competitiveness. The expected technological advances will result in some painful adjustments that, when completed, should eliminate the overcapacity that exists within the industry, provided that market signals are not distorted by government policies.

In addition, more intensive use of resources, more effective management, and regional shifts in production patterns could, under the right circumstances, expand the production of agricultural products within the United States. These potential changes have led to a 2.4 percent productivity growth rate forecast for U.S. agriculture as a whole, which is significantly above the rate of growth for the sector since 1950. Countries that allow market incentives to operate and that effectively manage commercialization of biotechnology and genetic engineering are expected to lower their costs of production and reap substantial benefits as a result of their greater international competitiveness.

Conditions may now be in place for an eventual economic and financial recovery of the U.S. agricultural sector. Nevertheless, the painful adjustment process currently underway will continue. Given appropriate reforms in government policies, these adjustments will eventually lead to a lower cost structure for the sector, fewer farmers, ultimately higher incomes per farmer, and an improved financial structure for American agriculture.

GLOBAL DISTORTIONS IN AGRICULTURE

Not only has the United States subsidized its agricultural sector, but other developed countries have also pursued similar strategies. Until the Food Security Act of 1985, however, one major difference existed because of high and inflexible price supports within the United States: U.S. commodity programs frequently encouraged farmers to turn their commodities over to the government. As a result, much of this supply became locked up in public stocks and did not enter the export market. Some countries, using the high U.S. price as an umbrella, promoted expansion of production and exports that would be otherwise unprofitable. Accordingly, U.S. agricultural exports fell from their 1981 peak of more than $43 billion to a level of $26 billion in 1986.

In fact, the net agricultural trade balance for the United States was negative for several months during 1986. Although this fact may be surprising, especially in light of the recent decline in the foreign exchange value of the dollar, several reasons contributed to this deficit. The dollar fell against major currencies, but not against the currencies of major agricultural exporters such as Argentina, Australia, Brazil, and Canada. Also, the recession of the early 1980s, from which many Third World countries have still not recovered, reduced economic growth abroad. Large harvests in a number of countries (e.g., Soviet Union) also played an important role. And because the Food Security Act of 1985 dramatically lowered price supports from one crop year to another (1985 to 1986), major importers during the first half of 1986 had no incentive to purchase supplies from the United States until new dollar price supports took effect. For example, at the end of July 1986, cotton was priced in the United States at approximately 64 cents per pound; at the beginning of the new crop year, August 1, cotton cost about 31 cents.

But the fundamental difficulty behind U.S. export performance is pervasive government intervention in domestic agricultural markets. World agricultural markets have been distorted by government policies in both the developed and the developing world. Policies in some industrial countries support and protect domestic farmers and shrink potential import markets. Sometimes the policies are so drastic as to turn net importers into net exporters. A dramatic rise in the yen against the dollar will have little impact on U.S. agricultural exports to Japan if trade barriers restrict the flow of such goods, regardless of price.

As a general rule, developed countries raise farm prices above market levels through policies that lead to an overcommitment of resources to agriculture. On the other hand, developing countries have taxed the agricultural sector, forcing prices below levels that would be generated by the market, often causing local shortages. Thus, developed countries are pushed toward a net export position and developing countries toward a net import position—regardless of underlying comparative advantages.

In the industrialized world, governments generally increase the size and scope of the agricultural sector. Often the underlying goal of industrialized countries is to raise farm income, which is achieved through schemes that protect their small but sacred agricultural sector against foreign competition. For example, Japan protects its inefficient rice producers through trade barriers, the EC protects almost all of its farmers, and the United States shields components of its agricultural sector from import competition and assists its exports through subsidization (Table 5-3).

TABLE 5-3.—*Sources of producer support equivalents for selected countries and major commodities, 1982–84*

Commodity	Japan	European Community	United States
Grains	State trading	Price supports maintained by intervention purchases Variable levy Export refunds	Deficiency payments PIK entitlements CCC inventory operations and commodity loans
Oilseeds	Deficiency payments	Deficiency payments	CCC inventory operations and commodity loans
Dairy	Price supports through government stockholding and trade barriers Some deficiency payments	Price supports maintained by intervention purchases Variable import levies Export refunds	Price supports maintained by tariffs, quotas, and government purchases
Livestock	Beef: Quotas Tariff Domestic price stabilization Pork: Variable levy Poultry: Tariff	Price supports maintained by intervention purchases Variable import levies Export refunds	Beef: Tariff Other: General (research and development, inspection, etc.)
Sugar	Price stabilization Import levy	Price supports maintained by intervention purchases Variable import levies Export refunds Production quotas	Price supports Import quotas

Source: Department of Agriculture, Economic Research Service.

The cost of the "common agricultural policies" in the EC is enormous, with about the same budgetary costs as in the United States. The direct subsidy cost of the EC agricultural policy during 1986 is estimated to have been $23 billion, with as much as $3 billion spent on surplus disposal. Taxpayers and consumers together subsidized farmers in the EC by up to $40 billion a year during 1984. This subsidy is now significantly higher. In Japan, which has about half the GNP of the United States or the EC, taxpayers subsidized farmers by $10.5 billion in 1985, but as consumers they paid many orders of magnitude above this amount. Japanese consumers pay food prices that are estimated to be around 60 percent higher than would be the case if the fall in world prices and the yen appreciation since 1980 had been reflected in internal agricultural prices.

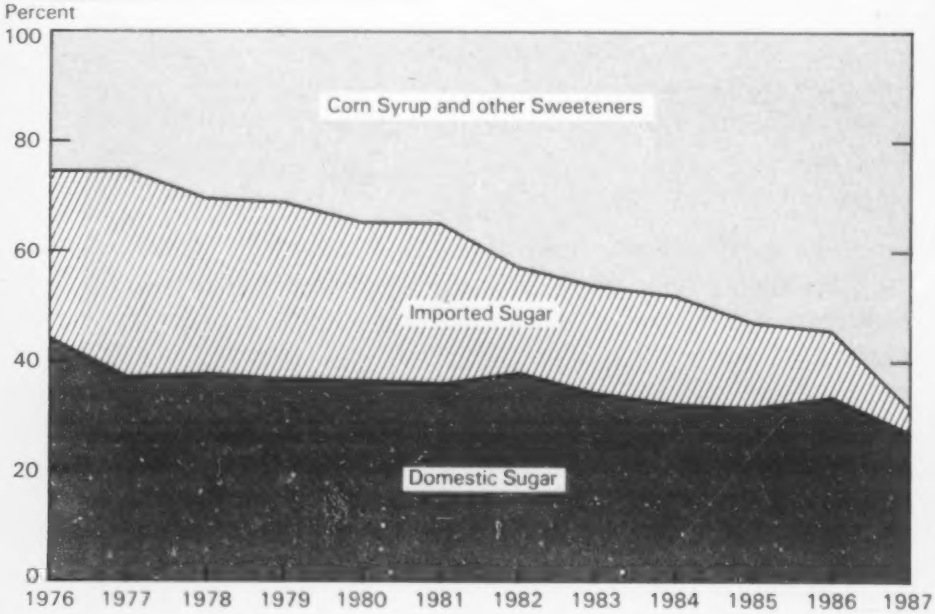
For the early 1980s, a recent World Bank study found that if all the subsidies and protectionism throughout the industrialized world were removed, taxpayers and consumers would save $100 billion a year, while farmer incomes would fall slightly more than $50 billion. For 20 or so developed countries, current taxpayer and consumer costs are in the neighborhood of $150 billion per year.

Government price supports give rise to incentives to import those goods, potentially displacing the farmers the government seeks to help. Thus, governments have two choices: introduce barriers to trade, or purchase domestic and imported supplies until the world market price is bid up to the internal level. Because the latter policy would require extraordinary government outlays, most governments impose trade restrictions that involve no budgetary expenditures but impose losses on consumers. With few exceptions, trade restrictions instituted through border measures are in place solely to validate domestic farm programs. Hence, a country's agricultural trade policy is derived largely from its domestic support programs.

Import quotas are quite common because they are more binding in their protection. A classic example is the import quota that the United States imposed recently to maintain internal price supports for sugar at three to four times the world price. As the differential between internal sugar and world prices has increased, the import quota has become more binding, as shown in Chart 5–5. Sugar imports have fallen dramatically, while use of a major substitute, corn sweeteners, has increased significantly because of the high internal prices of sugar. The high price not only makes the production of substitutes more profitable, but induces consumers to switch consumption away from expensive sugar. Furthermore, protection for sugar has led to protection for other goods. In 1985, the United States put quotas on processed goods that contain sugar (e.g., cakes and pancake mixes) because sugar quotas encouraged their import. The large gap between the U. S. and the world price of sugar even made it profitable to extract the sugar from these goods and sell it in the United States.

Chart 5-5

Shares of Total U.S. Consumption of Sweeteners



Note.—Data are for crop years; 1986-87 are preliminary estimates.

Source: Department of Agriculture.

Protection in the industrial countries has, to some extent, prevented the developing world from sending more agricultural products abroad. This result, combined with the export subsidies used to dispose of surplus production, has allowed the export share of industrial countries to rise from about 42 percent in the early 1960s to about 63 percent in the mid-1980s.

By contrast, agricultural policies in developing countries are, in general, biased against the agricultural sector, regardless of the country's net export or import position. Government interventions tend to shift resources out of agriculture by lowering its profitability relative to industry and manufacturing. Because of the large size of the agricultural sector compared with other sectors in many developing country economies, agriculture is taxed heavily to raise government revenue. Export taxes in the range of 50 to 75 percent are not unusual. This taxation reduces the country's exports and market share in world trade.

One way to quantify the effect of government policies on agriculture in developed and developing countries is to compare producer subsidy equivalent levels and consumer subsidy equivalent levels. These ratios indicate the net effect of government policies on producer and consumer incentives. Producer subsidy equivalents measure, as a percent of crop revenues, the value to producers of trade and domestic policies. The most recent producer subsidy equivalents (1982–84) indicate clearly that all developed countries subsidize their agricultural producers. Across all commodities, the weighted producer subsidy equivalents (in percentage terms) for some of the major industrial countries over the period 1982–84 are as follows: Japan, 70; EC, 41; U.S., 22; Canada, 24; and Australia, 6. In 1986, these figures for all countries have increased, especially the U.S. subsidy equivalents. In the case of wheat, beef, and dairy, the cost of producer support is borne mainly by consumers in the EC and Japan, while the United States and other developed countries use budget contributions (except in dairy or sugar support) to assist producers (Table 5-4).

TABLE 5-4.—*Who bore the cost of support to producers, 1982–84*

[Percent of producer support]

Country/Region	Commodity		
	Wheat	Beef	Dairy
European Community			
Borne by consumers	67	92	77
Budget contribution	34	8	23
Japan			
Borne by consumers	63	76	58
Budget contribution	37	24	42
United States			
Borne by consumers	29	42	95
Budget contribution	71	58	5

Note.—Data are for crop years.

Sources: Department of Agriculture (Economic Research Service) and Council of Economic Advisers.

Consumer subsidy equivalents measure the value, as a percent of consumer costs, of government policies to consumers, with negative figures indicating consumer taxation. Consumer subsidy equivalents show that developed countries tax consumers almost uniformly across commodities. For example, these equivalents for beef, pork, and poultry are around −5 for the United States and range between −1 and −25 for the EC. The developing countries are divided again: East Asian newly industrialized countries generally tax consumers, whereas some countries such as India, Argentina, and Nigeria often subsidize consumers.

The importance of the disincentives inflicted upon agriculture in LDCs can best be dramatized when those disincentives are removed. After two decades of sluggish growth, agricultural output in the Peoples Republic of China has soared since 1978, when regulations were liberalized and prices were allowed to rise and approach market-determined levels. This remarkable expansion, making China now the largest wheat producer in the world, was achieved almost entirely through productivity gains. The amount of land (including irrigated) under cultivation and the use of tractors for farming declined between 1978 and 1983; the major change was the incentive system.

Nations that have not liberalized their agricultural policies, particularly those in Africa, have suffered from food shortages and even widespread malnutrition and famine. When the enormous surpluses of the developed economies are juxtaposed with the situation of poorer LDCs, the world agricultural imbalance seems particularly galling. The problem is not one of agricultural supply, however, but one of allocation. The poorer countries are not underfed because they need more agricultural production, but because they lack the income to buy more food on world markets. By liberalizing their agricultural policies and allowing market incentives to motivate their farmers, poorer LDCs can not only increase domestic production in products for which they have comparative advantage, but they can also increase rural incomes so they may trade for the foodstuffs essential for a healthy populace.

INTERNATIONAL COSTS OF AGRICULTURAL POLICIES

Even though agricultural policies may be aimed at domestic concerns, their effects spill over to the rest of the world. For example, the distorted price incentives in industrialized countries stimulate production that directly or indirectly depresses world prices. The depressive effect is particularly pronounced when a government subsidizes the sale of stocks on the world market, makes concessional sales, or simply donates the food as aid.

Sugar is a glaring example of the international cost of industrialized country policies. The EC and the United States have both guaranteed high prices for domestic sugar producers, which has led to growing domestic production. The EC sugar program turned the Common Market from a net importer to a net exporter in 1977. The United States, under its current sugar policy, may make the same change soon. The U.S. and EC sugar policies have placed great burdens of adjustment on many developing countries. These sugar policies have not only eliminated a major importing market for countries whose climate is more naturally suited for sugar production, but also promise to make the EC and the United States export competitors. One study estimates that industrialized countries' sugar policies cost the developing countries about $7.4 billion in lost export revenue during 1983, reduced their real income by about $2.1 billion, and increased price instability in the residual world market for sugar by approximately 25 percent. The list of sugar-producing countries that suffer from these policies almost coincides with the list of countries and regions that are of utmost interest to American policymakers, e.g., Philippines, Brazil, and Central America.

In essence, by expanding output and depressing domestic demand, the agricultural protectionist policies of industrialized countries reduce world prices and distort the relative prices of agricultural versus other goods. Prices for the most highly protected products are depressed more than prices of other agricultural products. These distorted prices make the use of resources in world agriculture even less efficient. If Japan were to reduce its protection of the rice varieties in which other Asian countries have a comparative advantage, they—and Japan—could achieve greater efficiency and higher income. When farmers in the Netherlands produce ~~vegetables in~~ greenhouses because energy costs are subsidized, they indirectly discourage farmers in Mediterranean countries from pursuing their natural advantages in the production of these products.

Differential rates of subsidization also create particular difficulties for LDCs when the rate of support for processed agricultural products exceeds that for raw products. In industrialized countries, tariff and nontariff barriers tend to be higher on more processed forms of a particular good. As a result, escalating support of agri-processing severely disrupts economic development by blocking the most natural step toward industrialization. Such policies have resulted in industrialized countries exporting larger quantities and importing smaller quantities of processed products than of related raw materials. For example, the EC accounts for 11.4 percent of world wheat exports, but 48.9 percent of wheat flour exports. Developing countries often respond to such policies by subsidizing local processing industries, which inevitably encourages further inefficiencies and compounds the direct harm arising from industrial countries' tariffs.

Any one country's competitiveness depends not only on its own efficiency but also on the political decisions of other countries. The returns to a country from the world market may be undermined by increased direct and indirect subsidies. For example, high target prices for U.S. rice coupled with marketing loans have resulted in large U.S. exports imposing significant costs on Thailand, a major rice exporter. The same basic policies for cotton have generated similar, although not as dramatic, effects for Egypt, Bangledesh, Mexico, Guatemala, Paraguay, and other cotton-exporting countries.

EXPORT-MARKET RESPONSIVENESS

During the policy debates on the Food Security Act of 1985, supporters of the legislation emphasized the dependence of the U.S. agricultural sector on foreign markets. The general view was that exports led to the boom of the 1970s and the bust of the early 1980s. As a result, if American agriculture were to escape its plight, exports would have to lead the way once again. Unfortunately, the length of time before lower price supports would improve U.S. agricultural export performance was underestimated.

The effectiveness of the new policy in enhancing exports of U.S. agriculture depends critically upon the responsiveness of export demand to price. The evidence shows that the short-run responsiveness of export demand for many commodities from the United States is relatively weak. As a result, increases in export volume will lead to lower total values of exports in the short run because the fall in prices will be sharp enough to offset the increase in volume sold. Over the longer run, 3 to 5 years in the case of many commodities, lower prices can be expected to drive inefficient producers out of the market, force some government policy changes, and stimulate greater consumption, thereby increasing export sales at higher prices.

Exports of agricultural products depend heavily on government behavior throughout the industrialized world. Only if protectionist policies are curbed will it be possible to increase demand for farm products from those countries that have comparative advantages. Certainly over the next few years, major competitors of the United States can be expected to make some adjustments in their production. However, if total market demand increases only moderately in response to declining market prices and slow growth in foreign income, any significant increase in either the U.S. share of world trade or in the volume of exports is unlikely. Some increase in share and some gain in volume might occur, of course, but they may not correspond to the dramatic reduction in U.S. price support levels. The current protectionist policies that are pursued throughout the world, the large overcapacity in place, and the worldwide market fragmentation will serve to limit growth of U.S. exports over the balance of the 1980s.

REFORM OF U.S. AGRICULTURAL POLICY

The Food Security Act of 1985 and its predecessors have helped to create many new problems that afflict the U.S. agricultural sector, and have failed adequately to solve many old problems. The fundamental flaw is that Federal farm subsidy payments are linked directly to farm production. Because farmers are paid subsidies (explicit or implicit) that are proportional to their output, they are encouraged to produce even more. Excess production must either be stockpiled by the government, dumped on world markets, or restrained through inefficient land or production restrictions.

To the extent that price supports are above market-clearing prices, government stocks accumulate while exports fall. This design has also contributed to instability and uncertainty on private markets. For example, government management of commodity generic certificates can exacerbate the volatility of wheat and corn markets. If no further generic certificates are released, the market will expect corn and wheat prices to rise above current loan rates, because most stocks will be held in government hands rather than by the private sector. In contrast, if the Department of Agriculture releases a large number of generic certificates, market prices will fall below the loan rates.

Two of the major features of the Food Security Act of 1985 are the high target prices and the relationship between government income-support payments and production decisions. Under the act, target prices are set at high levels and are not permitted to decline until 1988 for feedgrains and wheat and 1987 for cotton and rice; furthermore, the scheduled reductions in target prices are far too small (2, 3, and 5 percent, respectively, for the years 1988, 1989, and 1990 in the case of feedgrains and wheat). The limited decoupling of government income payments and production decisions provided by the 50-92 provision is insufficient. This small step in the direction of decoupling is not expected to have any major effect on the current chronic surpluses and overcapacity within the sector.

The Administration seeks major revisions in the 1985 act in order to reduce budget exposure, provide fairness, restore a sense of proportion to agricultural policy, attempt to set loan rates at or below market-clearing levels, and move more meaningfully in the direction of decoupling production from payments. Specifically, the Administration proposes to extend the 50–92 provision to a 0–92 provision; administratively and legislatively tighten the definition of a "person" for purposes of the payment limitations; limit the total payments to $50,000 per person; reduce target prices from 1987 by 10 percent per year through 1990; and provide more flexibility in establishing loan rates for program crops.

Under the 0–92 provision, farmers would receive payments based on historical acreage, without being required to plant the program crop on those acres. To ease the adjustment from chronic surpluses, any land that might be idled under this provision could not be used to produce any other crop. Hence, this provision does not allow total decoupling of program payments and farmer production decisions. The proposed revision simply means that participating farmers can collect 92 percent of what their income subsidies would be under full production, even though all of their land is idle. Current law requires that at least half of their land be planted.

The proposed $50,000-per-person payment limitation pertains to deficiency and land diversion payments, as well as to marketing loan payments in the case of cotton and rice, and loan deficiency payments for other program crops. Under current law, the 1987 limit is $250,000. Tightening the definition of a person will achieve consistency and fairness in the application of payment limitations by closing loopholes that circumvent current legislative intent. The current loose definition of "person" has fostered a proliferation of overlapping partnerships and other farm reconstitutions in order to qualify for multiple payment limits.

The proposed reduction in target prices is expected to lead to a decline in agricultural program outlays by $13 billion over fiscal 1988 through 1990. This action would reduce the current incentive to overproduce and also contribute to reductions in the budget deficit.

If loan rates are above market prices, incentives will still remain to plant for the government and not the market. Thus, an important step in decoupling is to reduce loan rates to below market prices. Under the proposed revisions, the Secretary of Agriculture could reduce loan rates by up to 10 percent per year. Current law establishes loan rates by formula (75 percent of 5-year moving average, dropping the high and low price), but superimposes a limit on how fast annual adjustments can be made to the computed formula loan rate. The current limit is 5 percent, after a special provision of 20 percent for some commodities. The proposed revision would allow U.S. prices to be more competitive, reduce incentives to produce for the loan rate itself, and make the decoupling more effective.

Because the program for crop year 1987 has been largely determined, many of the revisions can be adopted only for years 1988 through 1990. The 0-92 decoupling provision could, however, be instituted immediately. The proposed revisions for the past 3 years of the current legislation would provide an effective transition to a more comprehensive and coherent agricultural policy.

The Administration also proposes changes in the U.S. sugar program to deal with the distortions generated by current policy. The proposed reform would lower the price-support loan rate to 12 cents a pound while providing transition payments to cane and beet producers over a 4-year period. Prices paid by domestic sugar consumers will fall as a result. By modifying the incentives that distort domestic production and consumption, U.S. sugar policy moves slowly toward a more market-oriented position.

SUPPLY MANAGEMENT BIAS

The cornerstone of any comprehensive reform of agricultural policy is the elimination of incentives to produce for government programs rather than for the market. As long as such incentives exist, surpluses will be generated. As a consequence, the government will attempt to manage supply by acreage reduction programs, voluntary diversion, acreage set-asides, or production quotas.

Given the changes that have occurred within agriculture, the supply management bias of current programs is doomed to failure. The sector's capacity to produce under the stimulus of favorable economic conditions and large government subsidies is extremely high. As a result, the cost of agricultural commodity policies that attempt to restrain production and enhance prices through land controls are in short, toweringly expensive. Moreover, a program attempting to limit supply by renting land from farmers, by outright purchases of farm commodities, or by mandatory supply controls cannot avoid directing its benefits to the largest producers. For a given supply reduction, most of the idled land or the eliminated production must come from the 15 to 20 percent of all producers who account for approximately two-thirds of total production.

Attempts to limit supply fail to exploit the continued growth in world food markets. Although increases in the acreage reduction and the voluntary diversion programs can provide some short-term assistance in reducing current chronic surpluses, this benefit can only be achieved by incurring other costs. These other costs include the losses imposed upon consumers, the reduction in markets for the farm supply industry, and the increase in costs for food processing and distribution. Moreover, acreage controls result in the excessive use of other inputs, which partially offsets the desired production cutback. Such programs are not cost-effective in terms of government outlays.

Mandatory acreage controls could be more effective than current voluntary programs in managing the total amount of land allocated to a particular crop but at a high social cost. Recent Department of Agriculture studies show that a 125-million-acre reduction in cropland would be required to raise commodity prices 30 to 40 percent. This program would discourage domestic use, cut exports sharply, devastate the farm supply industry, raise costs for the entire food processing and distribution chain, and impose huge losses on U.S. consumers. This option applied to feedgrains would reduce earnings for livestock producers throughout the United States. Exports of farm commodities could be expected to fall 40 percent. This mandatory control program would reduce GNP by $64 billion and eliminate approximately 2.2 million jobs, a number almost equal to all the farmers in the United States. The greatest impact would fall on the poor, who spend the largest portion of their income on food. Moreover, in comparison with current programs, the concentration of benefits among large producers would be even greater, with no effective payment limitation.

Subsidies could be offered to counteract some of the adverse effects, such as those on the U.S. livestock industry and on export sales. Such subsidies, however, would drive the cost of the mandatory acreage control program above even the high costs that were incurred during fiscal 1986.

All attempts to limit production will impede the international competitiveness of the U.S. agricultural sector, both in cost and output. In acreage reduction programs, for example, farmers must retire a certain fraction of their acreage base, e.g., 20 percent in the case of corn, to receive deficiency payments. Thus, every firm in the industry is asked to spread its total fixed cost over 80 percent of its potential output. This scheme raises the average cost of production, relative to competitors who suffer from no such constraints. Moreover, supply management policies create an artificial scarcity of farmland, bidding up its price to a higher level than otherwise would have occurred.

Finally, limiting output places the United States in the position of being the residual supplier to world commodity markets. Whatever growth occurs in world food markets is allowed to be tapped by major competitors. Moreover, the supply management bias of agricultural programs in the United States lowers the costs to other countries of subsidizing their agricultural sectors. As a result, U.S. programs operate to improve the position of major competitors in terms of both their access to major markets and the cost of their agricultural policies.

A COHERENT LONG-TERM AGRICULTURAL POLICY

A comprehensive policy to foster and maintain a vital and progressive U.S. agricultural sector would contain four major components: complete decoupling, targeting, resource conservation, and negotiation and trade cooperation.

Complete Decoupling

Under complete decoupling, payments to farmers would not be linked to current production either through subsidies or artificially high prices. Production decisions would be based on economic incentives, not governmental policy. Set-asides and acreage reduction programs could be phased out over a specified period of time. Distortions such as intensive use of inputs would diminish, and budgetary outlays would largely be known in advance.

Decoupling could be phased in by allowing increasing discretion with regard to the use of idle land. For example, after a period of time in which idle land could not be used for any other crop, 20 percent of the land could be planted in any crop, then 40 percent, and finally 100 percent. Income support could also be decoupled from prices. Farmers should receive a known payment regardless of what they plant and the market price they receive. The income support that has been decoupled from production and prices should be phased out.

Targeting

Separating payments from production and prices would make it possible to target such transfers so as to preserve the family farm and rural communities while protecting the rural landscape. Targeted income-deficiency payments would preserve some farms unable to manage the riskiness of their operations, and would ease the costs of labor adjustment from agriculture for other farmers. Income supports targeted at those who rely more heavily on farm income and yet do not have the immediate resources for retraining, job searching, etc., would ease the inevitable pain of change and improve the long-term flexibility of U.S. agriculture.

Targeted farmers should receive income supports unconditionally. Farmers could then employ their support in whatever fashion they considered most appropriate—from retraining to remaining in farming. One possible method of targeting would be to have payments based on current acreage and historic yields with a limit to the qualifying farm size.

Resource Conservation

One feature of the Food Security Act of 1985 that is in the long-run interest of the United States is the provision for placing highly erodible land in the conservation reserve. Under the 1985 legislation, lands that pose significant off-farm environmental threats—for example, water quality damage—can also be included in the conservation reserve program. It is the largest conservation program in the history of Federal agricultural policy, calling for the voluntary, gradual enrollment of 40 million to 45 million acres of land. Under this program, landowners agree not to produce on qualifying cropland for 10 years in exchange for an annual rental payment. Unfortunately, this program is hampered by competing supply management programs. In essence, the government is bidding against itself to idle farmland. Currently, most farmers are better off collecting deficiency payments or diversion payments for idling acreage under commodity programs than by idling land on a long-term basis under the conservation reserve program.

Over the period that supply constraints are being phased out, difficulties stemming from the concurrent operation of the conservation reserve program and the price-support programs must be resolved. The joint operation could be effectively managed by the introduction of a land-targeting scheme. Lands declared eligible for the conservation reserve program would be declared ineligible for the acreage reduction program.

A redesigned conservation reserve program, combined with decoupled and targeted income support, would reduce incentives for intensive land use that arise when farmers seek to increase their immediate cash incomes. Finally and most significantly, the elimination of commodity programs that connect income supports to production levels would ease the extensive and intensive use of land and other resources in production. The significant reductions in the use of pesticides and other chemical inputs resulting from these program changes would also reduce environmental damage.

Negotiation and Trade Cooperation

The current state of agricultural trade can be described as one in which many countries feel trapped. If any country reduces its export subsidies or limits its farm support, it will lose market share. Its own action will rarely be sufficient to induce a significant rise in world prices. Thus, the rewards to individual countries from unilateral agricultural policy reform often seem too little to encourage change.

Simultaneous action by many countries might break this trap. The Administration began a coordinated move to raise the issue of agricultural protectionism at the last economic summit. How to achieve multilateral, systematic rationalization of policies across sovereign states with different resource endowments and policy mechanisms, if not policy objectives, remains a major challenge.

The difficulty of international cooperation in adjustments, however, does not excuse delay in U.S. policy reform. Reform is in the self-interest of the United States and should be initiated regardless of whether trading partners act as well. In addition, the reformed policies would eventually stimulate other protectionist countries to make similar adjustments.

Although sound economic grounds exist for greater market orientation even with no action by other countries, the chances of significantly reducing the degree of protection provided to U.S. agriculture are far better if coordinated moves also occur in other major agricultural exporting countries. The political feasibility of implementing decoupled and targeted deficiency payments is greatly enhanced if other industrialized countries would pursue similar actions.

A cooperative effort of major agricultural exporting countries could involve coordinated and lockstep moves in decoupling. The possibility of such cooperative ventures is much higher in today's environment because of the huge subsidization under the Food Security Act of 1985. In contrast with the U.S. legislation governing the early 1980s, many exporting countries, including Australia, Canada, and Argentina, now have far more incentive to enter a cooperative effort to reduce worldwide protectionist trade policies.

CONCLUSION

Today's highly complex patchwork of agricultural policies has become increasingly antiquated and unproductive. Agriculture and rural communities have become so vastly different in structure and in their relationships to the domestic and world economies that the premises underlying current policies are no longer valid. Besides costing taxpayers and consumers billions of dollars and representing a significant portion of the Federal deficit, agricultural policies divert land, labor, and other resources from more to less productive uses. The huge surpluses generated in the United States and throughout the world harm U.S. allies and less developed countries, while providing huge windfalls to powerful economic interest groups. These programs are unfair, with some individuals receiving millions of dollars from the government.

The policy reforms outlined here would correct the major imbalances that exist within U.S. agriculture. Other reforms are also needed. For example, some Federal marketing orders attempt to maintain or enhance commodity prices by restricting either the amount produced or the amount marketed. These market regulations tend to tax consumers in order to generate extra profits for established producers of the protected commodities. Such marketing orders should be deregulated. In contrast, marketing orders that focus on research, promotion, and providing timely information to producers and consumers should continue to be supported. The Farm Credit System faces huge losses and is currently unable to diversify the risk of its loan portfolio; it needs to be restructured. Federal and State governments must address problems such as depleted aquifers, groundwater contamination, water salinity, and the excessive use of irrigation water attributable to inappropriately administered prices. The challenge facing both the public and private sector is to invent the means for enhancing agricultural productivity while reducing the cost of environmental externalities.

To be sure, the Food Security Act of 1985 will not yield easily to a major overhaul. These policies, after all, are tied to a long series of legislative precedents, deeply embedded goals and objectives, and the vested interests of powerful groups. Major opposition will doubtless arise to the reforms outlined here, which are in the best interest of the U.S. taxpayer and consumer. Reforming agriculture would lead to huge gains not only here in the United States but in the rest of the world.

CHAPTER 6

Risk and Responsibility

RISK IS A FACT OF LIFE. Every person balances risks of accident and injury against the attainment of other goals, and trades off some kinds of hazards against others. Whether to smoke, take a particular job, travel by automobile or airplane, use a safety belt while driving, or engage in a dangerous recreational activity are all decisions that involve risk. People are subject to hazards from the actions of other individuals as well. Determination of the proper role of government with regard to personal risk is a complex and important public policy issue.

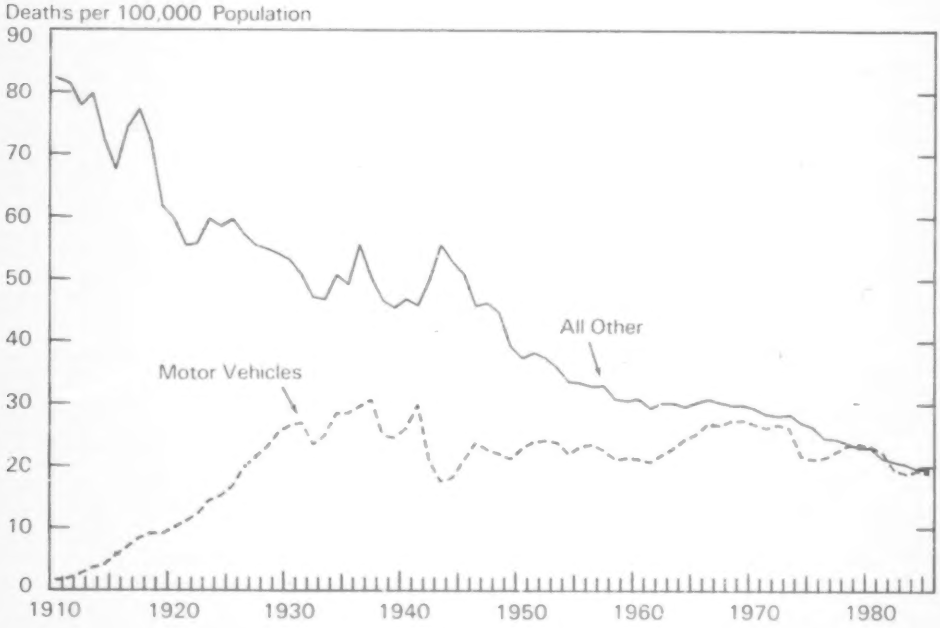
Health and safety have improved dramatically in the United States during the 20th century. Life expectancy at birth increased from 47.3 years in 1900 to 62.9 years in 1940 and, by 1983, had risen to 74.7 years. Much of this improvement is attributable to the decline in infant mortality, but adult life expectancy has also increased. In 1900, a 40-year old could expect to live to age 67.9. This expectation increased to 71 by 1940, and rose further to 77.2 by 1983. This represents a gain of 9.3 years, or a 33 percent increase in the expected number of years remaining at age 40.

Accident fatality rates have declined at the same time. Chart 6–1 shows annual fatality rates from motor vehicle and all other accidental causes. The rate from all causes other than motor vehicles dropped from 82.4 per hundred thousand population in 1910 to 20.9 in 1982. Motor vehicle deaths per hundred thousand population generally have been steady since the late 1930s. Automobile travel has increased substantially over this period, however, and traffic fatalities per hundred million vehicle miles have fallen almost 80 percent, from 10.89 in 1940 to 2.47 in 1985.

Both the home and workplace have become safer. The home accidental death rate per hundred thousand population decreased from 21.2 in 1948 to 8.6 in 1985. The accidental death rate at work has fallen by more than two-thirds since the 1930s (Chart 6–2). Work-related death rates differ across industries, and one cause of reductions in the overall rate has been the change in employment patterns as production has shifted from agriculture and other relatively danger-

Chart 6-1

Rates of Accidental Deaths by Cause



Sources: Public Health Service and National Safety Council

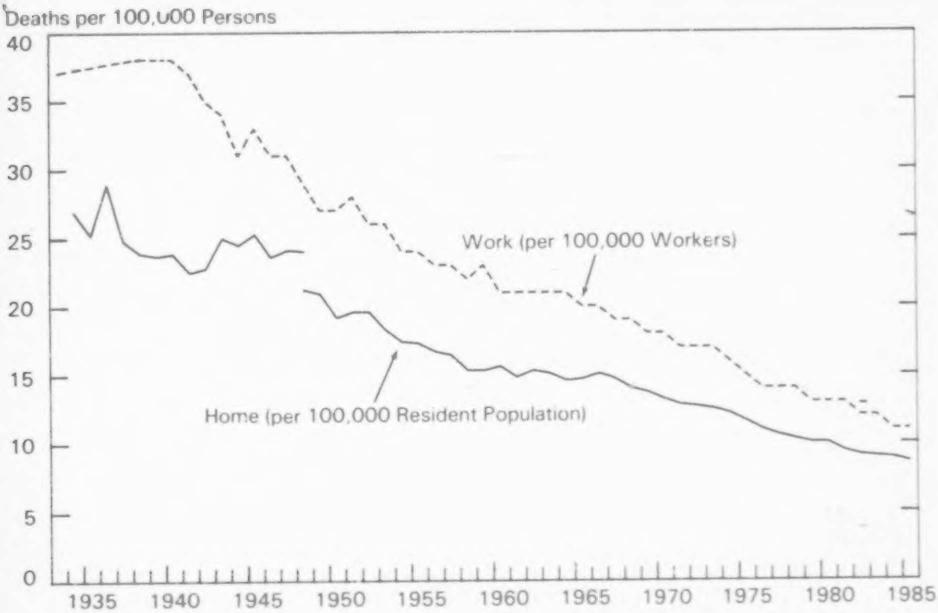
ous goods-producing industries to the relatively safer service industries.

The underlying source of these improvements in health and safety is economic growth and a rising standard of living. Higher incomes enable people to purchase better nutrition, clothing, and shelter as well as more and better medical care. A higher standard of living enables consumers to purchase safer products, safer forms of transportation (including safer automobiles), and safer living environments. Increased wealth supports improved public health measures, from vaccinations to water and sewage treatment. Economic progress has been a major factor leading to advances in science and medicine that have mitigated or eliminated many dread diseases and have improved the treatment of accident victims.

But accidents, injuries, and disease can never be avoided entirely. Individuals do not seek to avoid all risks, and the human lifespan cannot be extended without limit. Increases in health and safety often cannot be achieved without cost, and are only one way in which economic progress can be translated into greater well-being.

Chart 6-2

Rates of Home and Work Deaths Due to Accidents



Note.—A change in classification resulted in a break in the home accident series in 1948.

Source: National Safety Council.

PROTECTION AGAINST RISK

Every individual can reduce risk by exercising personal care. If responsible adults voluntarily undertake risky activities, such as hang gliding, their choices must be respected in a society that values individual liberty and autonomy. This general principle of respecting personal choice is compatible, however, with governmental action to reduce risk in particular circumstances, especially when the actions of some increase the risks to others.

The institutional means for increasing safety and reducing risk are provided through three social arrangements—markets, the legal system, and government regulation. Markets create incentives for safe behavior and allow individual choice in decisions involving risk. Consumers can purchase reductions in risk directly by choosing safer products. Safety is a desirable product characteristic, like durability and energy efficiency. Companies that earn reputations for making unsafe products face retribution in the marketplace, just as if they charged excessive prices or offered shoddy goods. The market also promotes safety in the workplace. All other things equal, employers must pay higher wages for riskier jobs, which creates an incentive to reduce occupational hazards.

Private insurance enables individuals and firms to protect themselves against the costs of various risks. Consumers purchase insurance against losses from death, illness and accidents, and some kinds of natural disasters. Manufacturers insure against product liability lawsuits, and professional practitioners insure against liability for malpractice. By spreading the costs of risk, insurance can also undermine incentives for safe behavior; but where premiums are closely linked to the likelihood of events insured against, safety incentives are substantially preserved.

Markets cannot entirely protect an individual from being harmed by the actions of others. The legal system, specifically tort law, provides victims the opportunity to be compensated. By transferring to those who cause harm the costs they impose on others, tort law creates incentives for individuals to behave responsibly.

GOVERNMENT MANAGEMENT OF RISK

Government provides the legal and judicial framework for the market and tort systems, offers insurance against some risks, imposes regulatory standards, and operates programs to control risk directly. Government protects the integrity of the marketplace by prohibiting dissemination of false or fraudulent information by sellers. Government supports basic health research, and informs the public about health and safety characteristics of products.

Several circumstances may provide a rationale for government regulation. First, consumers may lack the information or the ability to assess particular risks accurately. Second, individuals or firms fail in some cases to take account of the costs of harm they impose on others. The tort system may not be able to force a person who causes harm to bear these costs if the person's wealth is insufficient to compensate the victim, the cost of using the tort system is too high, or the person who caused the harm cannot be identified. Third, if markets and the tort system cannot adequately control externalities such as those leading to environmental pollution, government regulation may be warranted. Government regulates risk and safety through agencies such as the National Highway Traffic Safety Administration (NHTSA), the Consumer Product Safety Commission (CPSC), the Occupational Safety and Health Administration (OSHA), and the Environmental Protection Agency (EPA).

Regulatory policy encompasses both risk assessment (determination of the probabilities of harm) and risk management. Risk management should reduce and not merely displace risk. If one dangerous product is banned, more harmful ones may be used. Substitutions of this sort can exchange known risks for unknown ones. Effective risk management assesses the relative benefits and costs of actions to reduce particular risks. The benefits of regulation include avoidance of deaths, injuries, and property damage, as well as saving resources that otherwise would be used to mitigate these adverse consequences. Costs of regulation include the resources, both public and private, that must be devoted to meeting regulatory standards, as well as reduced competition in some cases. Government regulation sometimes restricts freedom of individual choice by imposing common standards. Regulation may, in addition, retard innovation and investment, thus slowing economic growth.

If some regulations show a much lower cost per life saved or accident avoided than others, adoption of the more cost-effective ones would save more lives for a given level of risk-reduction costs. Regulatory actions with the highest expected net gains should be undertaken first, leading to consistency in cost-effectiveness across regulations. A policy of consistency should apply to all activities of government that affect risk: for example, statutes and regulations; Federal programs that directly affect safety, such as air traffic control and the oversight of aircraft maintenance; and State and local activities, such as highway construction and firefighting. Complete consistency, however, is neither attainable nor desirable. States determine their own regulatory policies in many areas, in accordance with principles of federalism. Special significance may be attached to reducing particular types of risks, such as those faced by children, or risks that are not assumed voluntarily.

Statutory language sometimes impedes the realization of consistency by setting goals that do not take account of costs. Examples are portions of the Clean Air Act, Clean Water Act, and Occupational Safety and Health Act, as well as the Delaney Clause of the Food, Drug, and Cosmetic Act. Agencies may also fail to promote consistency in their rulemaking by implicitly assigning widely differing values to saving a life. A recent study shows that the average cost per life saved varies across regulations from as little as $100,000 for NHTSA's 1967 steering column protection rule to $132 million for the Food and Drug Administration's 1979 ban on diethylstilbestrol (DES) in cattle feed. Some proposed regulations have even higher costs, such as EPA's proposed restrictions on the disposal of dioxins and solvents on land, estimated to cost $3.5 billion per life saved. The regulatory review and coordination process implemented by this Administration is designed to improve consistency across Federal regulations, to the extent permitted by law.

Regulatory review established under Executive Orders Nos. 12291 in 1981 and 12498 in 1985 is meant to ensure that regulations are worth their costs and that the most cost-effective regulatory activities are given priority. The oversight process is based on the principle that government regulations, when such interventions are appropriate, should maximize the net benefits to society. Where regulation is excessive, deregulation is indicated.

PERSONAL RESPONSIBILITY

Individuals can mitigate or eliminate many of the most serious risks they face by exercising personal choice. Government can inform individuals about the nature of risks, alter incentives that influence individuals' decisions, or require safe behavior. Two risky activities—cigarette smoking and automobile use—illustrate these points.

SMOKING: THE GREATEST AVOIDABLE RISK

Smoking presents the largest single source of health risk in America. Table 6–1 lists risks of various activities in terms of the annual fatalities for every 1 million exposed individuals. The fatality risk of smoking is more than 26 times greater than that of work.

TABLE 6–1.—*Estimated risks of various activities*

Activity or cause	Annual fatalities per 1 million exposed persons
Active smoking	2,950
Alcohol	541
Accident	275
Disease	266
Motor vehicles	187
Alcohol-involved	95
Non-alcohol-involved	92
Work	113
Swimming	22
Passive smoking[1]	19
All other air pollutants[1]	6
Football	6
Electrocution	2
Lightning	0.5
DES in cattlefeed	0.3
Bee sting	0.2
Basketball	0.02
All causes	8,748
All cancers	1,917

[1] Cancer deaths only.

Note.—Activities are not mutually exclusive; there are overlaps between categories. Differences in fatalities do not imply proportionate differences in years of life lost.

Sources: Office of Management and Budget and Council of Economic Advisers.

Every annual report of the Surgeon General since 1964 has identified cigarette smoking as the single most important source of premature mortality among Americans. Studies estimate that of the 565,000 deaths each year from heart disease, 170,000 result from cigarette smoking. Of the 412,000 deaths each year from cancer, 125,000 result from cigarette smoking, with more than 100,000 of these from lung cancer alone. A 25-year-old man who smokes one pack of cigarettes per day can expect to live 4.6 fewer years than one who does not smoke at all, and one who smokes two packs per day can expect his life to be shortened by 8.3 years. Life insurance companies usually charge smokers higher premiums reflecting their greater mortality risk. Some health insurance carriers have also introduced premium differentials based on smoking.

The issue of smoking goes beyond matters of individual choice; secondary smoke affects others. The Surgeon General reports that a nonsmoker whose spouse smokes more than one pack of cigarettes per day has a risk of lung cancer 1.3 to 1.9 times higher than a nonsmoker whose spouse is a nonsmoker. Passive smoking results in an estimated 2,500 fatal cancers per year. Children of smokers have more respiratory problems, and are more frequently hospitalized for bronchitis, pneumonia, and respiratory allergies. Smoking-related fires led to 1,500 deaths and another 4,000 injuries in 1984.

It is not clear whether the pleasures of smoking outweigh the health risks and other costs, even for smokers themselves. When surveyed, more than 90 percent of smokers say they want to quit, and the majority of smokers have tried to quit at least once and failed.

Most smokers begin to smoke as adolescents. Studies of why people start smoking identify the influences of parents, siblings, and friends as the most important causal factors. School curricula in the past tried to discourage smoking by emphasizing its long-term health effects. Newer curricula, targeted at ages 10 through 14, focus on the social influences that encourage the initiation of smoking. Such programs aim at helping children acquire the behavioral skills to resist these influences and at changing perceptions that smoking is mature and sophisticated. Students who participate in these programs have started smoking at rates 15 to 50 percent lower than those in control groups.

The price of cigarettes also influences whether people smoke. Higher prices discourage young people from starting to smoke, but have a much smaller effect on habitual users. The Federal excise tax on cigarettes was raised from 8 cents per pack to 16 cents per pack in 1983, but was scheduled to revert to 8 cents in 1985. Instead, the tax was maintained at 16 cents, and as a result an estimated 1.9 million fewer people smoke, including more than a million fewer under age 25.

Current Federal agricultural policies toward tobacco do not undermine public health efforts to discourage smoking. A system of allotments allows farmers to produce only specified quantities of tobacco and limits the amount they can market. The net effect of the allotments plus price supports and other subsidies is to hold tobacco prices slightly higher, and quantities slightly lower, than they would be in the absence of these programs.

Evidence suggests that information on the consequences of smoking influences behavior. The largest decline in per capita sales of cigarettes, a fall of 8.9 percent, occurred during 1953–54, following publication of two retrospective epidemiological studies that linked lung cancer to smoking and the first laboratory demonstration that the tar in cigarette smoke could cause cancer in animals. During this time, tobacco companies competed vigorously by advertising purportedly less harmful brands, indirectly reminding smokers of the dangers of smoking. The second largest decline in per capita sales occurred in 1968–69, during the height of the antismoking campaigns on television. The largest decline in the number of smokers followed the 1964 Surgeon General's report.

The effects of tobacco advertising are complex. There is little evidence that advertising results in additional smoking. As with many products, advertising mainly shifts consumers among brands. Evidence from other countries suggests that banning tobacco advertising has not discouraged smoking. Four industrialized countries with market economies—Italy, Finland, Iceland, and Singapore—have completely banned advertising for tobacco products, yet have experienced a rise in the per capita consumption of tobacco. Sweden and Denmark enacted partial advertising bans, yet achieved greater success in reducing consumption than did Norway and Finland, which imposed total advertising bans. After the broadcast advertising ban in the United States, cigarette use continued to decline, but at a slower rate than before the ban.

The ban on broadcast advertising was supported by the large tobacco companies. Tobacco advertising expenses were about 35 percent lower in the 5 years following the ban. It is likely that reduced access to public attention made it harder for new brands of cigarettes to enter the market, thus solidifying the market shares of existing companies and brands. Moreover, with no tobacco advertising on television, the antismoking messages required under the Fairness Doctrine were eliminated.

Increased awareness of the health risks of smoking has brought a change in public attitudes and government policies. Forty-two States and the District of Columbia restrict smoking in public places, including government workplaces. Twelve States restrict smoking by public employees and also by those in private businesses. New rules for Federal employees prohibit smoking in nearly all public work areas, including general office space, and permit smoking only in designated areas.

Many automobile deaths stem from avoidable behavior such as drunk driving and failure to wear a safety belt. In 1985, about 44,000 Americans died in motor vehicle accidents, including 6,800 pedestrians and 890 bicyclists. Nearly half of the fatalities involving occupants of motor vehicles occurred in single-vehicle crashes. Despite this substantial loss of life, 1985 was the safest year on record for motorists: the death rate per hundred million vehicle miles traveled (HMVM) was 2.47, down from 5.50 in 1966 and 21.0 in 1923.

Drunk Driving

Alcohol impairs physical coordination and can increase aggressive behavior. Alcohol contributes to many kinds of accidents and injuries and is involved in more than 50 percent of fatal automobile accidents. Drunk driving is the leading cause of death for persons in the 15-to-24 age group. About one-half of all single-vehicle crashes and two-thirds of nighttime single-vehicle crashes involve alcohol-intoxicated drivers. In 1982, 63 percent of those killed in alcohol-related automobile accidents were drivers, bicyclists, or pedestrians who had been drinking. Twenty percent were passengers (both drinking and sober) of drinking drivers. The remaining 17 percent, nearly 4,000 people, were sober victims.

Evidence from other countries and recent experience in the United States suggest that programs to deter drivers from drinking by increasing penalties and enforcement tend to succeed in the short run to the extent that they alter drivers' perceptions of the certainty of punishment. But the ability of such programs to achieve lasting reductions in drunk driving fatalities has not been established. This may be because none of the programs or experiments to date has been able to sustain an increase in the probabilities of apprehending and punishing drunk drivers.

State and local actions to restrict the availability of alcohol to young people by raising the minimum drinking age have contributed to reduced traffic fatalities. In 1982, 31 States allowed people under 21 to buy alcoholic beverages, but by 1985, only 7 States did. In those 3 years, motor vehicle fatality rates fell 3.0 percent for the general population, but 6.3 percent for drivers aged 24 and under. If the traffic fatality rate for this group had fallen only by the same amount as for the general population, approximately 600 additional young drivers would have died in automobile accidents in 1985.

Higher alcohol taxes would also reduce fatalities. Federal excise taxes on beer and wine have remained constant in nominal terms since 1951. As a result of this and other factors, the real price of beer fell 27 percent, of wine 21 percent, and of hard liquor 48 percent between 1951 and 1983. Studies of teenage drunk driving indicate that if the real excise tax on beer were at its 1951 level, an estimated 1,000 fewer deaths per year would result, primarily of persons aged 18 to 21.

Safety Belts

Motor vehicle occupants who wear a safety belt are less than half as likely to die in the event of an automobile accident as those who do not. If all occupants of motor vehicles wore safety belts, 12,000 to 15,000 fewer persons would die annually. Safety belt use is a clear example of how an individual can reduce risk by taking a simple precaution. For this reason, some State courts, although not going so far as to hold that an accident victim's failure to wear a safety belt constitutes contributory negligence, have reduced the unbelted victim's damage award on the grounds of failure to mitigate the harm.

Even though voluntary safety belt use is an extremely low-cost way to reduce deaths and injuries, as of 1984 only about 12.5 percent of passenger car drivers were estimated to use them. Usage among teenagers appears to be particularly low. Since 1984, 26 States and the District of Columbia have enacted laws requiring use of safety belts (although two States recently repealed theirs). Safety belt usage increases after passage of a belt law, but the longer term effect does not appear to be as great as the initial response.

Compliance with child safety seat laws has been much higher than compliance with safety belt laws, and has been effective in reducing fatalities among young children. In 1977, the first child safety seat law went into effect. Now all 50 States require safety seats for small children. Compliance rates are between 50 and 60 percent. The motor vehicle fatality rate for the overall population fell 10 percent between 1975 and 1985, but for children under 5 it fell 32 percent.

Air bags and automatic safety belts are passive restraints that do not require the cooperation of the driver or passengers. Air bags are more costly to install than either automatic or conventional safety belts. Moreover, their cost-effectiveness relative to safety belts falls with more widespread belt usage. Even if air bags were required in all new cars, they would not come into nearly universal use until about 10 years later. Current Department of Transportation regulations require phased installation of passive restraint systems unless States comprising two-thirds of the U.S. population enact safety belt laws.

The 55-Miles Per Hour Speed Limit

The driver who speeds assumes a higher risk of death and injury but also increases risk for others. It is because of this externality that a maximum speed limit is in the interest of most drivers. The main cost of a lower speed limit is more time spent traveling.

The primary goal of the National Maximum Speed Limit Act of 1974 was energy conservation. Today, with low real oil prices, debate concerning the 55-miles per hour (MPH) speed limit focuses more on safety than energy conservation. From 1973 to 1974, the overall death rate per HMVM dropped 14 percent from 4.12 to 3.53. (A similar drop of 13 percent in the death rate, from 3.17 to 2.76 per HMVM, occurred between 1981 and 1982.) Although drivers have gradually increased their average speed since the 55-MPH limit was introduced, they have not returned to the speeds at which they were driving before the Federal limit was enacted. The fatality rate per HMVM, however, has continued to fall, suggesting that factors other than speed are important in the declining fatality trend.

Variations in fatality rates across States and types of roads suggest that speed limits should be tailored to local conditions. In 1985, the automobile accident fatality rate ranged from 4.1 deaths per HMVM in New Mexico to 1.6 in North Dakota. The safest roads are the interstate highways in urban areas, with a fatality rate of 1.01 deaths per HMVM. Local rural roads are the least safe, with a fatality rate of 4.99. Driving at night is three times more risky than driving during the day.

Although it left enforcement of the 55-MPH speed limit to the States, the Federal Highway Safety Act of 1978 directed withholding a portion (up to 10 percent) of a State's Federal highway funds if it failed to achieve at least 50 percent compliance. As a result, States assign their highway patrol officers to enforcing the 55-MPH limit, diverting them from other efforts that would be more effective in saving lives. To reach compliance, States have an incentive to allocate most officers to work during the day, when traffic is the heaviest, rather than at night, when a majority of motor vehicle deaths occur. State discretion in the regulation of highway speeds could improve safety more than centralized Federal regulation.

The Unintended Hazards of Fuel Economy Regulation

Like the 55-MPH speed limit, the Corporate Average Fuel Economy (CAFE) regulations are a vestige of the "energy crisis." The CAFE standards (enacted as part of the Energy Policy and Conservation Act of 1975) established minimum average levels of fuel economy for passenger cars sold by each automobile manufacturer. To meet the standards, manufacturers took a number of steps, including switching to lighter materials and reducing the weight and size of cars. Market forces also shifted the automobile fleet in the direction of smaller cars while gasoline prices remained high. Automobiles have become safer as design has improved. Other things equal, however, small automobiles are less safe than large ones.

In single-vehicle crashes, occupant death rates are inversely related to car size. In multiple-car crashes involving cars of the same size, occupants of small cars have a death rate higher than occupants of large cars. In crashes between cars of different size, the occupants of the larger car have a better chance of survival than if they had been involved in a crash with a car the same size, but occupants of the smaller car have a worse chance of survival than if they had been in a crash with another small car.

There is evidence that drivers of small cars attempt to mitigate their increased risk by driving more carefully. One study indicates that, taking age into account, drivers of small cars are somewhat less likely to be involved in an accident than are drivers of larger cars. Even so, the fatality rate associated with small cars is higher than that of large cars.

The "energy crisis" has passed, but Federal regulation of automobile fuel economy persists. To the extent that CAFE has reduced the size of cars driven by Americans, it also has indirectly reduced automobile safety.

THE TORT SYSTEM

In addition to self-inflicted injury, harm can result from the actions of others. Tort law, the civil law governing harms other than breach of contract, serves to compensate persons injured by the negligent or wrongful conduct of others, and also to deter such conduct.

Two general rules of liability guide accident law—negligence and strict liability. Negligence is determined by reasonableness of conduct. If the injurer acted unreasonably, that is, failed to exercise due care, then ordinarily the injurer would be required to compensate the victim. Strict liability, on the other hand, focuses on whether a product that caused an injury was defective in such a way as to make it unreasonably dangerous for its intended use. Both standards seek to impose a duty of care; strict liability, however, allows demonstration of the breach of that duty by examination of the product itself.

The product user's degree of care also can affect the risk of accidents. In certain instances, the user can more easily eliminate or reduce the risk of injury than can the manufacturer. The rule of contributory negligence limits the scope of liability so that an injurer is not liable for harm that could have been avoided had the victim not been negligent. Many States have adopted the rule of comparative fault, under which an injurer is liable only for that share of the harm corresponding to the injurer's share of responsibility. Determining the reasonableness of a party's conduct depends in part on the costs of avoiding the accident. When both parties can affect the probability or seriousness of an accidental injury, the rule of negligence (or the rule of strict liability accompanied by the defense of contributory negligence or comparative fault) leads both the potential injurer and potential victim to behave reasonably to avoid accidents.

THE "LIABILITY CRISIS"

During the past several years, products and services as diverse as vaccines and skating rinks have been withdrawn from the market because of the greatly increased price or unavailability of liability insurance. Investment in product innovations, such as new pharmaceuticals, has been retarded because of potential liability costs. Some explanations of the "liability crisis" attribute the scarcity of liability insurance to an expansion in liability exposure under tort law. In particular, the alleged crisis has been linked to trends in legal rules on fault and causation and to larger jury verdicts for damages.

In the early 1960s, courts began to replace traditional common law rules of negligence with strict liability. It was argued that expanding liability would encourage the supplier of a good to prevent accidents; in addition, the supplier would provide insurance for unpreventable injuries. Some courts went so far as to say that business defendants could spread the cost of compensating victims across all consumers simply by charging higher prices for their goods and services. This viewpoint assumed that society would benefit from replacing personal responsibility for accidental injuries with expanded liability for those supplying goods and services. Carried to its extreme, this approach would entirely remove the issue of fault or wrongdoing from the determination of liability.

The growing trend toward no-fault liability has increased defendants' expected tort costs and, therefore, their need for insurance coverage. Historically, tort law required a plaintiff to prove a direct cause-and-effect relationship between the defendant's act and the plaintiff's harm. This requirement of proximate cause eroded as some courts allowed plaintiffs to recover an entire judgment award from any of a number of parties who might have contributed to the harm. This application of joint and several liability to product liability cases increased the potential financial exposure of defendants and further weakened the traditional legal requirements of fault and proximate causation. In practical terms, joint and several liability threatens any defendant having substantial financial resources with the risk of having to pay the entire damage award in a lawsuit involving multiple defendants, even if this defendant was only slightly at fault for the plaintiff's injury.

TORT REFORM

Many States have enacted or are considering reforms in tort law. The Administration has also supported legislation to address the factors that have led to the high price and scarcity of product liability insurance. This legislation would ensure that fault remains a basis for determining legal liability for injury caused by a defective product. For a manufacturer to be found liable under strict product liability, the product would have to be defective and unreasonably dangerous because of its defect. This reform would limit strict product liability to situations in which the doctrine originally applied, before the expansion of no-fault liability.

Another provision of the Administration's tort reform proposal would make joint and several liability inapplicable to product liability cases. A manufacturer found liable for damages would be responsible for at most those damages directly attributable to its share of fault for the injury; the manufacturer could not be held responsible for damages arising from another party's share of fault. However, joint and several liability would still be available where two or more defendants consciously acted together in a common scheme or plan that directly caused the plaintiff's injury.

These proposals seek to ensure that fault and wrongdoing continue to be essential to determining liability for defective products. These reforms should lessen the unpredictability of product liability awards for manufacturers and insurers and, by emphasizing the importance of personal responsibility, reduce accidents.

CONSUMER PRODUCTS AND THE WORKPLACE

Of the 92,500 accident fatalities in the United States in 1985, about half were caused by motor vehicle crashes, 22 percent by accidents at home, and 13 percent by accidents at work. In an effort to improve safety, the government requires consumers and private firms to devote resources to meeting regulatory standards, develops and disseminates information, requires controlled testing of new drugs, and requires injury compensation insurance for workers. Government rules also modify market incentives for safe behavior.

CONSUMER PRODUCT SAFETY

Markets generate strong incentives for the production and safe use of consumer products. Safer products may be more expensive, because of superior materials, product design, and quality control. Many consumers are willing to pay higher prices for safer products as long as they perceive that the benefits of improved safety exceed the additional costs. Consumers acquire safety information through personal experience and word of mouth, as well as from manufacturers, specialized testing laboratories, and consumer groups. The risks of unsafe products generally are borne directly by consumers, with little spillover of hazards beyond the immediate household. Thus, market incentives will guide manufacturers to produce products as safe as consumers' willingness to pay allows.

The Food and Drug Administration (FDA) regulates food, drugs, and cosmetics. Its standard-setting and inspection activities are designed to reduce hazards about which it is difficult to obtain information in the marketplace. Examples include the safety of food additives and the safety and efficacy of pharmaceuticals.

The Delaney Clause of the Food, Drug, and Cosmetic Act has been interpreted to ban all food additives found by the FDA "to induce cancer in man or animal." In effect, this restriction has grown more stringent over the years, as advances in chemistry have permitted the detection of extremely small amounts of substances in additives. In 1985, the FDA proposed that methylene chloride be banned in hair spray, but that it be allowed as a decaffeinating agent in coffee because its risk in that use is negligible. This de minimis interpretation of no-risk statutory provisions is intended to reduce regulation that is overly costly. Recognizing the excessively restrictive nature of the Delaney Clause, Congress has exempted saccharin from its reach.

The Consumer Product Safety Commission (CPSC) has broad authority to set standards and order bans, recalls, and modifications. Its purpose is to reduce hazards by improving products' technological safety characteristics. Such activities, however, may fail to benefit consumers and can have adverse effects. Sometimes safer products are more costly, and regulation may impose higher safety levels than consumers are willing to purchase. To reduce the likelihood of this result, the law mandates cost-benefit analysis for formal CPSC rulemakings. The CPSC has adopted cost-benefit criteria for its other activities, such as implementing voluntary standards.

Even if a product standard meets a cost-benefit test, the market might have achieved an equivalent level of product safety. Moreover, even if the estimated costs of regulation match the benefits, regulated product standards may not be desirable because benefits that stem from product diversity will be lost. Consumers value safety, like other product characteristics, differently, in part because not all consumers use products in the same way. If a household appliance is to be used by children, parents may buy a safer model at a higher price than they would otherwise. Individuals benefit from the opportunity to make their own tradeoffs based on price, quality, and safety.

When product regulation reduces competition and thereby increases prices, it restricts consumers' choices. For example, in 1975 the CPSC issued a bicycle standard that imposed numerous technical design features that would increase costs and exclude some bicycles from the market. Some of these specifications, such as the one that handlebars be between 14 and 28 inches wide, were overturned in court for lack of evidence that their absence would pose an unreasonable risk of injury.

The effectiveness of product regulation in improving safety can be undermined and even reversed by risk displacement. For example, manufacturers of children's sleepwear used the flame-retardant chemical Tris to comply with the flammability standard issued in 1973. Later, when it was discovered that Tris can be carcinogenic, the sale of Tris-coated sleepwear was banned. Some consumers may stop buying products whose prices rise as a result of safety regulation, only to substitute alternatives that are more dangerous.

THE REGULATION OF NEW DRUGS

Advances in pharmacology have produced drugs that prolong life and improve health. Many diseases that took a substantial toll in the past, such as polio and pneumonia, are now inexpensively prevented or treated with vaccines or drugs.

Regulation of the introduction and use of new drugs poses difficult policy questions. Government oversight of the testing and approval of new drugs has both therapeutic benefits and costs. It is not in the public interest to introduce a drug with side effects or risks more severe than the disease it is intended to treat. The relative efficacy of a new drug compared with existing therapies cannot be established without controlled experiments, including clinical trials. However, the time spent in testing means that some potential beneficiaries of a new drug are not able to obtain it. Unnecessarily stringent regulatory requirements can lead to more deaths and lower health levels.

The 1962 amendments to the Food, Drug, and Cosmetic Act added a proof-of-effectiveness requirement that expanded the experimental and testing procedures required by the FDA for new drug approval. Some evidence indicates that the result was a delay in the introduction in the United States during the 1970s of certain innovative therapeutic drugs by as much as 3 to 6 years after their introduction in Great Britain. The 1962 amendments increased costs to pharmaceutical companies of introducing a new drug, and also lengthened the approval process, shortening the time that a manufacturer could retain patent protection. Incentives to innovate were thereby reduced.

Recent legislative and administrative changes have expedited drug review. Legislation in 1984 allowed an abbreviated approval process for generic versions of drugs previously proven safe and effective, and restored patent life lost during FDA review. In 1985, the FDA rewrote approval procedures for new drugs to reduce paperwork and allow expanded use of valid data from foreign studies. The FDA has also allowed controlled use of experimental drugs that show substantial promise in treating fatal diseases. Limited use of azidothymidine (AZT) has been permitted for treatment of acquired immune deficiency syndrome (AIDS). In certain cases, the agency also allows use of experimental drugs by patients suffering from serious diseases when there is no alternative treatment.

OCCUPATIONAL SAFETY

Risks of death from work accidents, along with other types of safety hazards, have declined sharply. Injury rates, which are less reliably measured than death rates, have also declined, but less rapidly. As people demanded better working conditions and safety on the job, they also sought increased government regulation of workplace safety. Among the many laws and regulations that address job safety, the major ones are State workers' compensation acts and the Federal Occupational Safety and Health Act. Both workers' compensation and the OSHA statute were expected to reduce work injuries, but many of their possible effects on costs were overlooked.

Labor Market Safety Incentives

Work-related accidents and diseases impose costs on employees that include premature death and disability, suffering, loss of earnings, and medical expenses. Safety and health on the job are not produced by employers alone, but are determined jointly by the actions of workers and employers. Individuals can reduce job risks by acquiring information about job safety and using that information to bargain for safer working conditions, as well as by exercising personal care. Workers and employers can enter into contracts or labor agreements that specify safe working conditions or payments to be made in the event of an injury.

The labor market provides strong incentives for employers to improve safety. In order to make a hazardous job attractive to workers, a firm must offer higher wages than it would have to pay otherwise. Wage premiums are a critical device for controlling job hazards because they provide employers with incentives to reduce hazards in order to reduce wage costs. Additional incentives for employers to increase job safety include the desire to reduce work accidents and injuries in their firms and the costs associated with job hazards—absence from work, interruptions in production, and employee turnover. The level of workplace safety is determined in a way that equates the marginal cost of additional safety measures with their marginal benefit to employers, as indicated by savings in wage premiums and other costs.

In efficient labor markets, wage premiums result in appropriate matching of workers and jobs based on risk and other factors. Workers who are more risk-averse will demand higher wage premiums for risky jobs than workers who are less risk-averse, and thus will be less likely to take jobs with relatively high probabilities of injury. Similarly, the labor market offers incentives to both workers and employers to implement job matches based on differing personal vulnerabilities to job hazards. For example, if short police officers face greater risks of assault, smaller people will be less likely to take police jobs for a given wage. To some extent, however, legal prohibitions against discrimination limit the ability of firms to screen workers on the basis of vulnerability to job risks.

Imperfect information may militate against fully efficient labor market outcomes, thus providing a rationale for regulation or other government intervention. However, studies have found evidence that job safety information, although not perfect, is generally adequate. Workers have reasonably accurate perceptions of risks, and if they acquire new information suggesting risks greater than they originally had expected, their likelihood of quitting increases.

Workers' knowledge of health risks is probably less accurate than their knowledge of safety risks. It is more difficult to link disease and work than accidental injuries and work because of the delayed onset of symptoms, difficulty of detecting many harmful agents, multiplicity of causes, and uncertainties in the relationship between exposure levels and health effects. Workers, however, are often aware of health hazards, and in some cases perceive very high risks from possible carcinogens in the workplace.

Government also has limited knowledge of occupational health hazards, but it can improve the information available to both employees and employers by supporting research on job safety and disseminating the results. Government, however, has no clear advantage over workers, labor unions, and employers in using this information to determine appropriate levels of workplace safety or the best way to reduce hazards.

Pecuniary costs of job injuries are commonly shifted to the general public by income transfers such as social security disability payments, welfare, and food stamps. This reduces firms' incentives to take safety measures, by enabling them to pay lower wage premiums. Even where information is not perfect or pecuniary externalities exist, however, wage premiums serve a useful function in providing safety incentives and in matching workers with jobs.

Workers' Compensation

Workers' compensation statutes were enacted in most States early in the 20th century. Before that, the principal recourse of workers who suffered job injuries was to sue their employers for compensation. Proving that the employer had been negligent and that the worker had not contributed to the accident was difficult, however, and damage awards were highly uncertain. Under workers' compensation, employers assumed no-fault but limited liability for work injuries, and industrial accident victims gained the right to prompt compensation for a portion of lost wages and medical expenses.

Except for the largest firms, which are allowed to self-insure, employers must buy insurance from a private carrier or a State insurance fund to cover their workers' compensation liabilities. Some State funds are exclusive carriers, but others compete with private insurers. Premiums are experience-rated—that is, linked to past loss experience—only for larger firms. The smallest firms generally are rated by industrial-occupational classifications; the degree of experience rating increases with firm size. Most workers are employed by firms that are either experience-rated to some degree or self-insured.

Although the impetus for adoption of workers' compensation was to replace employers' tort liability with a no-fault system, safety incentives were an additional consideration. Workers' compensation was expected to induce employers to provide greater workplace safety because each firm would assume the costs of its workers' injuries more predictably than under tort liability. The costs of industrial injuries thus would be included among other business costs, and employers would be motivated to reduce them by increasing job safety. This expectation of improved safety, however, overlooked factors that would undermine safety: reduced wage premiums in response to lower but more certain recovery of damages, and reduced incentives for employers to increase safety when workers' compensation premiums are not closely related to the injuries suffered by employees.

A growing body of research has found that workers' compensation benefits have unfavorable effects on safety. Higher benefits appear to increase both the frequency of work injuries and the number of compensation claims filed. One explanation for the positive connection is the claim effect. Even if actual injuries remain constant, workers are more likely to file claims when benefits are higher, thereby producing more reported injuries.

Lack of experience rating of workers' compensation premiums reduces an employer's incentives to invest in safety measures. A firm that is not forced to bear the full costs of compensating its workers for their injuries has a diminished incentive to make expenditures that promote safety. Recent research has found that increased benefits produce a smaller increase in injury rates in firms whose premiums are more highly experience-rated than in firms that pay class rates. Employers' safety incentives could be strengthened by requiring them to make a deductible payment and copayment on each claim. Many insurance companies maintain staffs that help their clients correct occupational health and safety problems, such as worksite fire hazards. To the extent that private carriers provide more accident-prevention services than exclusive State insurance funds, more of such services would become available by allowing private insurers to compete with or supplant such funds.

Workers' compensation has improved the reliability of compensation to injured workers. By replacing lost wages, it also has enabled injured workers to recuperate more fully before returning to work. There is evidence, however, analogous to findings on the effects of unemployment insurance, that higher levels of workers' compensation benefits create work disincentives. Recipients whose benefits are relatively high compared with their previous wages have longer durations of work disability. Work disincentive effects can be important: because benefits are not taxable, the after-tax rate of wage replacement for some workers exceeds 100 percent of their prior wages.

Although one goal of workers' compensation was to reduce the high transactions costs of litigation, many workers' compensation claims are still contested. Workers, moreover, are making liability claims with increasing frequency against suppliers of inputs, commonly in situations where adverse effects on health, such as those related to cancer, may be delayed. Such suits are not barred under the no-fault workers' compensation system.

Regulation of Job Safety

The Occupational Safety and Health Act's sweeping mandate is to ensure that "so far as possible every working man and woman in the Nation [has] safe and healthful working conditions." OSHA has issued several thousand workplace standards, the large majority of which were adopted soon after OSHA's formation and formalized existing industry practices. Some of the most obviously ineffective of these have since been revoked. Most of OSHA's rules deal with safety rather than health hazards. Employers continue to complain that OSHA's regulations are costly, but no comprehensive estimates of compliance costs have been made.

Compared with the magnitude of safety incentives provided in the market, OSHA's fines and enforcement activities are small. One estimate of wage premiums generated by job risks is approximately $90 billion per year, which compares with about $9 million in OSHA fines. By comparison, workers' compensation benefits are about $20 billion annually.

A number of studies have found that OSHA's activities have not been effective in promoting workplace safety. Before the establishment of OSHA, evidence was lacking that working conditions were safer or healthier in States with stricter regulatory standards. Over recent decades, the job fatality rate has declined fairly steadily by more than 2 percent per year. OSHA has not made an identifiable difference in this rate of decline. One recent study, however, has found that OSHA's activities have resulted in a small reduction in work injuries. It is more difficult to assess OSHA's effects on health, because of the time lag between a worker's exposure to a toxic chemical or environmental hazard and the manifestation of disease. This Administration has taken steps to enhance the effectiveness and reduce the burdens of OSHA's inspections. Inspections are now less confrontational and are targeted toward high-risk firms and serious workplace hazards.

OSHA's effects on health and safety may be small because of the type of regulations it has promulgated. Many require specific changes in the physical work environment rather than encouraging safe behavior. For example, OSHA has not required the use of automobile safety belts, although motor vehicle fatalities account for about one-third of total work deaths (Chart 6-3). Even in manufacturing, motor vehicle deaths are close to 20 percent of work deaths. Executive Order No. 12566, issued in 1986, requires safety belt use by Federal employees.

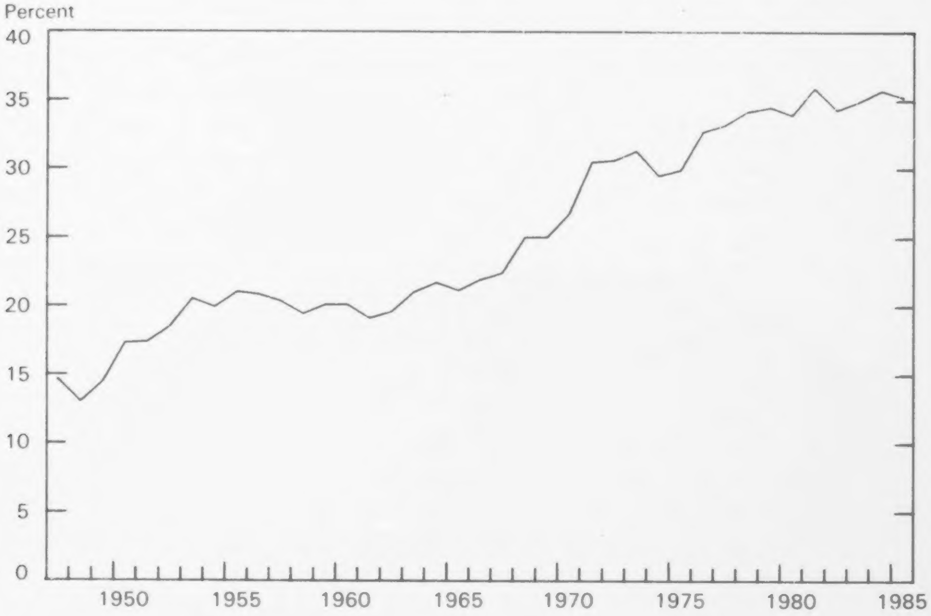
Although precise causation of work injuries is difficult to establish, studies show that individual behavior is a major factor in many work accidents. Studies of occupational fatalities have found that 9 to 40 percent are alcohol-related.

Executive Order No. 12291 broadly requires the use of cost-benefit criteria for agency rulemaking, to the extent permitted by law. The Supreme Court has interpreted OSHA's legislative mandate as prohibiting the balancing of costs and benefits in formulating health regulations. OSHA has adopted a restricted cost-effectiveness approach in accordance with this decision, allowing lowest cost methods of compliance in achieving a given technical standard. Studies of past OSHA rules show that costs typically exceed expected benefits. The recent OSHA hazard communication standard, requiring that workers be informed of workplace hazards, is an important exception.

A major criticism of OSHA is that many of its regulations have unnecessarily increased costs by preventing employers from using flexible means to meet health and safety goals. In contrast, OSHA's hazard communication rule requires that workers be informed about chemical hazards, but leaves employers leeway in implementation. OSHA regulations have tended to specify technical characteristics of

Chart 6-3

Motor Vehicle Deaths as Percent of Total Work Deaths



Source: National Safety Council.

workplace design. Performance standards, which define acceptable levels of workers' exposure to hazards and allow employers to find the most cost-effective ways to meet them, are often at least as effective. In the case of the cotton dust standard, for example, the risk of lung disease could be reduced by allowing the use of disposable masks. OSHA's preference for engineering controls rather than personal protective equipment is based, among other factors, on concerns that protective devices may be cumbersome, may not be used consistently, and may not provide adequate protection over long periods of time.

OSHA's preference for engineering controls is particularly costly in the case of noise control. Relatively inexpensive ear plugs can often protect workers as effectively as reducing the noise level, which generally can be achieved only through costly modifications in work processes, machinery, or plant design. It has been estimated that allowing greater flexibility in methods of compliance would reduce the cost of occupational health regulations by 20 to 80 percent.

Many of OSHA's standards increase costs and reduce productivity and competitiveness. Where OSHA's rules increase capital requirements, they also reduce employment opportunities, by encouraging the substitution of capital for labor. Where OSHA's rules specify characteristics of workplace design, they impose fixed costs that tend to favor larger firms over smaller ones.

The evidence on whether workers' compensation and OSHA have improved safety is mixed at best. Most studies indicate that these programs have failed to reduce job injuries in the aggregate. Although workers' compensation achieved some of its goals, it also may have undermined safety incentives. Both workers' compensation and OSHA have generated costs and indirect effects that have tended to reduce productivity.

ENVIRONMENTAL RISK

Environmental externalities stem from the release of harmful substances into a common resource, such as the air, a lake, a river, or the ocean. Lack of private ownership of such resources makes it difficult for those injured or inconvenienced to charge polluters for the losses suffered. The costs of organizing those harmed by pollution hampers the use of tort remedies. Aiso, the cause of the harm is frequently impossible to identify. The same pollutant may be produced by automobiles, utilities, industrial plants, and natural processes.

Management of environmental risk entails dealing with large uncertainties in the magnitude of potential losses. Environmental risks frequently involve effects extending over a wide area or across international boundaries, and sometimes include effects that may occur far in the future.

CONTROL OF AIR AND WATER POLLUTION

Direct controls have been the most common regulatory strategy for reducing pollution in the United States. Alternatively, if emissions were taxed or if permits for emissions were in a form that could be traded, emitters would take account of the costs of pollution they produce. Actual or implicit market valuation of these permits would induce firms to include the costs of pollution among their other costs of production. A market in pollution permits would result in a reduction of emissions to the required level at the lowest total cost. The Environmental Protection Agency has begun to implement market-based control programs, including "bubbles," which allow several sources to be considered as a group in meeting emissions targets. These emissions-trading strategies ensure that sources having the lowest costs of control will reduce emissions most.

The United States has devoted considerable resources to reducing pollution. In 1984, total public and private expenditures for pollution abatement and control were approximately $68.5 billion (1984 dollars), or 1.8 percent of GNP. Of these expenditures, 45 percent was for control of air emissions and 38 percent for water pollution control.

Measurable improvements in environmental quality have been achieved. Average concentrations of the six atmospheric pollutants subject to National Ambient Air Quality Standards (NAAQS) have declined over the past decade (1975-84). The NAAQS have been reached in almost all parts of the country for sulfur dioxide, nitrogen dioxide, and lead. In some areas, carbon monoxide and total suspended particulates standards have not been met. Surface-level ozone is the largest remaining problem, although most people live in counties that meet the ozone standard. Significant improvements in water quality have also been reported. It is difficult to determine, however, whether these gains carry with them benefits larger than the costs of their attainment.

Misallocations of capital and reduced productivity result from certain features of current environmental regulation. One example of this sort of distortion is the "new source bias." New plants must meet more stringent air emissions standards than old ones. Another example is that regions with air that is cleaner than national standards must regulate new sources to achieve "prevention of significant deterioration" of their already superior air quality. The first of these requirements gives an economic advantage to older plants compared with newer ones, while the second favors particular regions over others. Both discourage investment in more modern facilities.

CONTROL OF ENVIRONMENTAL RISKS

Management of environmental risk addresses more than the failure of markets to motivate firms and individuals to take account of the effects of their actions on the environment. Insufficient scientific knowledge often makes it difficult to balance the costs and benefits of alternative environmental policies.

Stratospheric Ozone Depletion

Stratospheric ozone has been a focus of research and policy concern since the 1970s. Certain otherwise useful and harmless chemicals—primarily chlorofluorocarbons (CFCs)—released into the atmosphere eventually diffuse to the stratosphere, where they may interact with and break down the ozone layer. A reduction in the amount of stratospheric ozone would allow more biologically damaging ultraviolet radiation to reach the Earth's surface. Increased ultraviolet radiation has been associated with deleterious effects on health, including various forms of skin cancer, and with reductions in the yields of some crops. CFCs also are greenhouse gases, like carbon dioxide, which may contribute to global warming.

CFCs and related compounds are stable chemicals used in refrigeration, air conditioning, and fire extinguisher systems; in foam production; as aerosol propellants; and in electronics manufacture. Annual world output of the two most important CFCs increased almost fivefold from 1960 to 1985. Worldwide production of these two chemicals peaked in 1974 and then declined until 1982, primarily because of reduction in their use as aerosol propellants in the United States (which banned nonessential aerosol applications in 1978) and a few other countries. Nonaerosol usage accounts for approximately 70 percent of all CFC applications, however, and total world production of the main CFCs has grown since 1982 by approximately 5.3 percent per year. Because of the long lifetime of the molecules, emissions may affect the ozone layer for many years.

Although the consequences of stratospheric ozone depletion may be extremely serious, estimates of the magnitudes of the potential damages are highly uncertain. The largest unknowns involve forecasts of future emissions of CFCs and other greenhouse gases, the physical and chemical mechanisms of ozone depletion, and the effects of increased ultraviolet radiation on living organisms. The recent discovery of large changes in the seasonal pattern of ozone levels over Antarctica raises doubts about the current state of knowledge about stratospheric ozone dynamics and chemistry. Some scientists claim that CFCs are the cause of these changes, but others believe they have a natural cause.

Ozone depletion is a global issue. Most world CFC production is concentrated in the industrialized countries, with the U.S. share slightly over 30 percent in recent years. Unilateral action to control CFCs is not likely to be effective, and could even reduce the opportunity for international cooperation by removing some of the incentive for other nations to reduce CFC release. International agreement on controls would prevent the loss of competitiveness that could result if the United States were to act alone to control CFCs further.

In 1985, the United States signed the Vienna Convention for the Protection of the Ozone Layer, which provides for international cooperation in research, monitoring, and information exchange. The United States is currently participating in negotiations to implement this agreement, and has proposed a near-term freeze on ozone-depleting emissions, a long-term reduction of emissions, and periodic review of controls. In view of the uncertainties regarding the extent and consequences of ozone depletion, it is appropriate that emissions reduction policy provide for periodic reassessment of the levels and effectiveness of controls as new information becomes available.

Acid Rain

Acid deposition, known as acid rain when it takes the form of liquid precipitation, is another major environmental concern. Acid deposition may have a number of adverse effects on the environment, but few are well established. Emissions of some air pollutants contribute to the acidification of certain sensitive lakes and streams, but other cause-and-effect relationships are not clearly understood.

Combustion of many types of fossil fuels produces oxides of sulfur and of nitrogen. These combustion products can be chemically transformed into acidic compounds, sometimes after being transported hundreds of miles from their source. Rain is naturally acidic, but manmade contributions to acid deposition are much greater than natural sources in industrial regions such as the Eastern United States and Southeastern Canada.

Air pollutants that are precursors of acid deposition are regulated under the NAAQS. The direct effects of these pollutants, such as soot, smog, and haze, as well as their possible hazards to health, are distinct from their indirect effects through acid deposition. Thus, reducing these primary pollutants would have benefits beyond those associated with the resulting reduction of acid rain.

The mechanisms of atmospheric transport in the acid deposition process are not well understood. The areas of North America that show apparent effects of acid deposition are generally downwind of the power plants, smelters, and urban areas that are the main sources of precursor emissions. But it is not known specifically what fraction of acid deposition in the Adirondacks, for example, originates in particular regions. Further, deposition varies from site to site and from year to year at the same site because of meteorological variations.

Uncertainty also surrounds the effects of acid deposition. Visible damage to U.S. forests appears to be confined largely to trees in the East, with most of the damage occurring at higher elevations. The hypotheses that have been advanced to account for the decline of these forests include the effects of climate cycles and other air pollutants as well as acid deposition. The effects of acid precipitation on surface waters are complex. Damage to lakes and streams can occur only if they are sensitive to acidification, that is, only if they lack naturally occurring neutralizing chemicals in their watersheds. Most large lakes in the Eastern United States are not acidified, either because they are not sensitive or are not located in areas of sufficient acid deposition. Although higher acid concentrations present a potential danger of dissolving heavy metals in municipal water supplies, no such contamination has been established in the United States. Adverse effects of acid rain on crops and soils have been suggested, but have not been shown to be significant.

Transboundary deposition is of major concern to Canada. The usual difficulties of assessing environmental risks and internalizing costs are magnified because some costs and benefits occur in another country. Acid rain has been the subject of high-level discussions between the United States and Canada, and the U.S. Government has endorsed a recommendation that it undertake a 5-year, $5-billion program in conjunction with private industry to develop a more extensive set of commercial control technologies than is now available.

Some proposals to control acid precursor emissions have been made that go far beyond these demonstration projects. Acid rain control programs that have been proposed in Congress would impose costs of $3 billion to $9 billion per year. Sulfur dioxide control methods include switching to coal with lower sulfur content, removing some of the sulfur before combustion (coal washing), or removing the sulfur during or after combustion. Costs tend to be lower for programs that involve switching from high-sulfur to low-sulfur coal, but switching would disrupt the regions that mine high-sulfur coal.

Current regulations and laws might be modified to alleviate acid deposition at relatively low cost. The Powerplant and Industrial Fuel Use Act of 1978, for example, prohibits use of natural gas in new industrial or electricity-generating facilities without a special exemption. Natural gas combustion releases minimal levels of sulfur dioxide and fewer oxides of nitrogen than coal burning. Use of coal is also encouraged by obstacles to the construction of nuclear power plants. More stringent air quality emissions standards for new sources have, along with other factors, prolonged the useful lifetime of older power plants, which produce relatively more acid precursors.

A large and rapid reduction in emissions nationwide would be very expensive. Low-cost options, such as liming of lakes, may be able to mitigate acidification in some cases. Identifiable economic benefits of lower levels of acid deposition in the United States appear to be small, although reducing acid precursors might benefit urban areas by improving ambient air quality. For any large-scale control effort, questions remain as to how best to achieve the desired results. For example, better understanding of atmospheric transport mechanisms is necessary to decide whether to target emissions from particular regions. The costs of undertaking an ambitious emissions control program need to be balanced against the relatively low risks of waiting to resolve the scientific uncertainties surrounding the causes and effects of acid deposition.

Biotechnology

Biotechnology is the use of biological systems and organisms in household, agricultural, and industrial production. In its broadest context, it is an ancient practice that includes such familiar applications as the use of yeast in baking bread and brewing beer and the use of cultures in making cheese and yogurt. The most recent advances include genetic manipulation technologies, such as recombinant DNA, recombinant RNA, and cell fusion, that allow more precise and predictable methods of producing old products or creating new ones.

The benefits of biotechnology to society are substantial, and include opportunities for new and better medicines and therapies for disease, more efficient food production, and pollution control. Biotechnology has already provided new drugs and improved existing drugs and vaccines. It has reduced the cost of insulin and interferon.

Health and safety concerns related to use of living organisms include the effects of accidental release from contained facilities and the side effects of environmental applications. Releases that occur commonly in facilities using low-risk microorganisms to produce products such as penicillin, tetracycline, or industrial enzymes are not harmful to persons or the environment. More stringent containment conditions are employed for hazardous organisms.

Introduction of new plants, animals, and microorganisms into the environment has long been commonplace. It occurs whenever new crop varieties are planted or animals are selectively bred. Microorganisms are released as pesticides and to improve plant growth. For example, large numbers of genetically improved nitrogen-fixing bacteria are added to agricultural soils in the United States each year.

The environmental risk from the release of a genetically engineered organism is that it may have unforeseen effects on plants, animals, or human beings. Because living organisms are self-replicating, it might be difficult to control the spread of an organism whose harmful effects were discovered only after its release. Adverse consequences from bringing an alien species into a new environment, however, are not confined to cases of genetic manipulation. The kudzu vine was introduced to the United States for soil conservation, but rapidly spread, becoming a pest in some areas. Other imported species, such as the gypsy moth, have caused environmental damage.

A framework for coordinating Federal regulation of biotechnology was established in 1986. This framework built on existing legislation and practices, but imposed additional levels of Federal review for certain environmental applications, particularly of new microorganisms. To the greatest extent possible, responsibility for regulating a specific product will be placed with a single agency. Regulatory coordination should reduce uncertainty, encourage consistency in the rigor of scientific reviews across agencies, and provide the flexibility to modify regulations as scientific knowledge advances. The aim of the Administration's regulatory policy is to safeguard public health and the environment without blocking the development and commercial use of this highly productive new technology.

CONCLUSION

Government regulation can reduce some risks significantly, but it can also reduce productivity, personal income, and individual choice. Risks ordinarily cannot be controlled without cost. The resources used to reduce them are not available for alternative improvements in safety or well-being. When government regulates, makes public expenditures, or requires private expenditures to reduce risk, the cost of these actions should be weighed against their likely benefits.

It is not possible to eliminate all hazards to safety and health, nor is it desirable for the government to attempt to reduce risks that could be controlled in less costly ways. In many cases, government control of risk is neither efficient nor effective. Markets accommodate individual preferences for avoiding risk and produce information that helps people make informed choices. Markets and the legal system provide powerful incentives for reducing personal hazards; government regulatory actions should avoid diminishing the incentives for safety that markets and tort law provide. Because many of the greatest risks are subject to personal control, government regulation can never replace the need for responsible individual action.

CHAPTER 7

Women in the Labor Force

WOMEN NOW CONSTITUTE 44 percent of the U.S. labor force. They provide services that range from teaching, air traffic control, medicine, and legal advice to administrative and technical support. Women have always played a major productive role in American society. In this century, however, they have increasingly shifted their productive activities from the home to the marketplace. This shift was accomplished through market processes, without the intervention of government in either job training or job placement activities.

In the early 20th century, about 20 percent of women worked outside the home, and those who did were typically single or widowed. By 1986, the majority of adult women (two-thirds of those between the ages of 25 and 54) worked outside the home and most were married. Female employment increased throughout the century, but the pace has accelerated since World War II. In the postwar period, the number of women working in the United States has risen from 16 million to 49 million. That this important structural change was accomplished in an environment of rising real wage rates underscores the flexibility and resilience of the U.S. economy. The chapter examines these extraordinary changes from an economic perspective.

Care and management of the home have always been important to society. One major reason that more women are able to enter the work force today is that household management requires less time than it did in the early 20th century. Previously, it required one full-time person (generally the woman) to perform necessary household tasks. Improvements in technology have increased the number of labor-saving devices in the home, and more goods that were formerly produced in the home can now be purchased outside it. Moreover, the decline in the birth rate has also reduced work demands in the home and provided more time for work in the market.

As demands on women in the household were falling, women's wages in the market were rising. The changes in technology that made labor-saving devices in the home widely available also altered the nature of market work and increased the returns to labor. Physical strength became less important in many jobs, service sector employment grew, and wages and salaries increased.

Changes in the household and the market meant that the wages women could command outside the home rose relative to the value of time spent in the home. This growing market opportunity encouraged women to enter the labor force. Real earnings of men increased throughout the 1950s and 1960s, at a time when married women were rapidly entering the labor force, implying that family standards of living would have risen even without the earnings of the wife. Thus, while higher real incomes for male wage earners meant less financial need for their wives to work, the attraction of higher wages and less need for women to work at home drew women into the labor market. In some years in the 1970s, however, real wages for both men and women fell. Then, many married women probably did enter the labor market to maintain family incomes. The 1980s have brought increases in both women's real earnings and women's earnings relative to men's, changes that further encouraged work in the marketplace.

The remainder of the chapter is divided into three sections. The first section describes the increase in women's labor force participation and the changes in their employment patterns. The second section discusses factors that affect occupational choice, and chronicles changes in the occupational distribution of employed women. The third section analyzes earnings differentials, and examines the pay gap between men and women.

EMPLOYMENT

The percent of the U.S. labor force that is female has risen from 18 percent in 1900 to 29 percent in 1950 to 44 percent in 1986. Table 7-1 shows the rapid rise of women's participation in the labor force since the turn of the century. As women entered the labor force, the market responded and a variety of new opportunities were created. The market also accommodated the preferences of many of these women for part-time work or flexible scheduling of hours.

Dramatically increased participation of women in the labor market is not a phenomenon confined to the United States. A recent study of 12 major industrialized countries shows similar patterns of socioeconomic change: urbanization, decreasing birth rates, increasing female education, and the growth of the service sector.

But the U.S. economy displayed a far greater capacity than the economies of other industrialized countries to absorb additional workers and create new jobs. Between 1960 and 1984, job growth in the United States increased by an average of 2 percent per year, double the rate for Japan. Over the same time period, there was vir-

TABLE 7-1.—*Labor force participation rates of women, by age, 1890-1986*

[Percent]

Year	Women 20-64			All women	
	All	White	Black and other	20-24	25-34
1890	17.4	14.9	38.4	30.2	16.8
1900	19.3	16.5	41.0	31.7	19.4
1920	22.9	20.7	43.1	37.5	23.7
1930	25.4	23.3	44.1	41.8	27.1
1940	29.4	27.9	42.9	45.6	33.3
1950	33.3	32.2	43.2	43.6	32.0
1960	42.3	40.9	54.0	46.1	36.0
1970	50.0	49.1	57.2	57.7	45.0
1980	60.8	60.5	62.8	68.9	65.5
1986	66.4	66.3	66.4	72.4	71.6

Source: There is some controversy over the Census counts of women workers in the 1890-1940 time period. Data here for 1890-1950 are from Bureau of the Census monograph, Gertrude Bancroft, *The American Labor Force*, New York, Wiley, 1958. Data for 1960-86 are from Department of Labor, Bureau of Labor Statistics.

tually no job growth in Great Britain or Italy, and employment in West Germany fell.

In recent years, a pattern of increased employment of married women with young children has emerged in most industrialized countries. As Table 7-2 shows for the United States, the historical pattern of married women staying home to care for children, especially small children, has changed considerably in recent decades. Women who maintain families alone have had high rates of market participation throughout the postwar period, and although participation rates for these mothers have grown, the major increase in female employment in recent decades has come from married women. The sharpest increases have been for wives with very young children. About 54 percent of wives with children under the age of 6 participate in the labor force. The rate for wives with infants is almost 50 percent, more than double the percentage in 1970.

TABLE 7-2.—*Labor force participation rates of women by age of youngest child, March of selected years, 1970-86*

[Percent]

Presence and age of child	Wives, husband present				Women maintaining families alone, 1986
	1970	1975	1980	1986	
Total	40.8	44.5	50.2	54.6	62.1
With children under 18 years	39.8	44.9	54.3	61.4	69.5
Under 6 years	30.3	36.8	45.3	53.9	57.9
Under 3 years	25.8	32.6	41.5	51.0	50.9
1 year and under	24.0	30.8	39.0	49.8	44.7
3-5 years	36.9	42.2	51.7	58.5	64.5
6-17 years	49.2	52.4	62.0	68.5	76.8
6-13 years	47.0	51.8	62.6	68.0	74.5

Source: Department of Labor, Bureau of Labor Statistics.

Although marital status and age of children are less important predictors of market participation than they were in the past, they still influence behavior, most notably for full-time employment. In monthly survey data for 1986, 36 percent of married women with children under 18 years of age worked full time, but 47 percent of widowed, divorced, separated, or never-married mothers with children in the same age group did so. The proportion of women who worked full time was lowest for those with very young children. Among married women with children aged 6 to 17, 45 percent work full time. But among those with children under 6, only one-third work full time.

Probably because of family responsibilities, more women than men work part time (fewer than 35 hours per week). Although the number of women who are working part time has increased, the proportion of the adult female labor force that wants part-time jobs has not changed since 1970. And, over this same time period, approximately one-third of all women who worked in a year worked part time. However, the percent of women with the strongest time commitment to the labor force (full-time and full-year) is rising, while the percent with the weakest time commitment to the labor force (part-time and part-year) is falling. In 1985, virtually half of women who worked in the market worked full time for the entire year, while only 12 percent worked part time for part of the year.

UNEMPLOYMENT

In the 1950s and 1960s, unemployment rates were higher for women than men, even though women tended to be employed in industries and occupations where layoffs were less common. Women's higher unemployment rates can be attributed primarily to their more frequent movement into and out of the labor force. Moreover, because men tend to work in industries that are more affected by business cycles, differences between male and female unemployment rates widened in upswings and narrowed during recessions. In the late 1960s, a period of generally low overall unemployment, the unemployment rate for women was about 70 percent greater than that for men. In the 1980s, however, overall rates of unemployment are higher than in the 1960s and male and female unemployment differences have narrowed considerably. In 1982 and 1983, the female unemployment rate fell below the male rate for the first time in the postwar period.

Seasonally adjusted unemployment rates were 6.6 percent for both men and women in December 1986. Equal male and female unemployment rates, however, reflect the outcome of two opposing forces: a higher proportion of female new entrants and reentrants, which increases women's rates relative to those of men, and occupational and industrial employment patterns that lower women's unemployment rates relative to male rates.

HOME WORK VERSUS MARKET WORK

Individuals tend to split their hours between home and market work such that an additional hour spent in each will furnish roughly equal benefits. Urban residence, fewer children, and labor-saving household appliances decrease the time required to produce a given level of benefits from work in the home, and thereby reduce the number of hours necessarily devoted to home work. More education and previous labor market experience raise market productivity and the value of market time, providing additional incentives for work outside the home.

The marginal rate at which income is taxed influences decisions about market work, nonmarket work, and leisure. Taxes create a differential between the individual return to an hour of market work (the after-tax wage) and the productive return to society (the before-tax wage). In 1980, the top marginal Federal tax rate on labor income was 50 percent, and in some special cases was even higher. With this marginal rate, individuals could have been considerably more productive in market than in nonmarket work, but would have been better off working an extra hour in the home than in the workplace because the output was not taxed. Under the Tax Reform Act of 1986, the top marginal rate will be 28 percent, although a surcharge on certain relatively high incomes will make it 33 percent. Therefore, the tax reforms that the Administration is implementing should reduce the disincentives against market work built into previous tax rates.

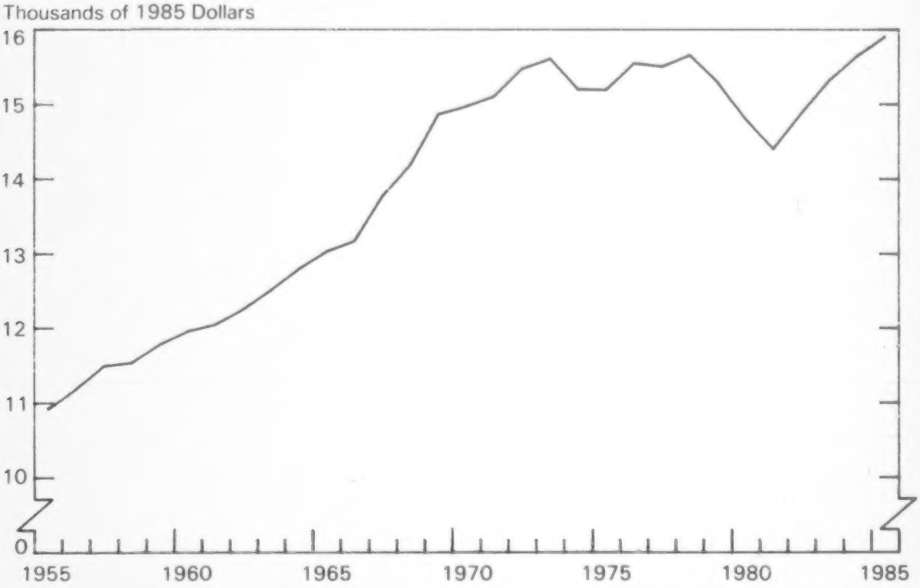
Although labor-saving devices played an important role in reducing the number of hours women spent doing housework in the 1940s and 1950s, working wives still spend substantial time doing housework. Survey estimates from the mid-1970s indicate that wives employed full time averaged 25 hours of work in the home and 39 hours of work in the market each week, while husbands employed full time averaged 13 hours of work in the home and 47 hours of work in the market. (Work in the market includes commuting time.) As women have increased their market work and reduced their nonmarket work over the past two decades, men have done the opposite. Between the mid-1970s and the early 1980s, men aged 25 to 44 cut their market work by 1 hour a week and increased their work in the home by almost 3 hours a week, while women in the same age group increased their market work by 4 hours and cut their work in the home by a little more than an hour.

The Role of Wages in Increased Participation

Researchers estimate that over half the growth in female employment between 1950 and 1980 was in response to the real wage increases illustrated in Chart 7-1. Real wage growth affected market participation both directly, through the attraction of more income, and indirectly, through reductions in the number of births. The indirect effects were estimated to be as large as the direct effects. The peak of the postwar baby boom in 1957 was 3.8 births per woman, but over the past decade the rate has been about 1.8 births per woman.

Chart 7-1

Women's Real Annual Earnings



Note.—Data are median wage or salary income of year-round, full-time, civilian workers (14 years and over through 1978 and 15 years and over after 1978). Self-employed persons are excluded. Data beginning 1975 are not strictly comparable with earlier figures.

Data are converted to 1985 dollars using the consumer price index for all urban consumers.

Sources: Department of Commerce, Department of Labor, and Council of Economic Advisers.

The rest of the growth in female employment is related to factors such as decreases in the time required for household work and changes in husbands' income. Between 1973 and 1981, husbands' real earnings fell about 10 percent and, in response, wives probably increased their work effort. In addition, as work expectations generally increased, labor supply decisions were probably based more on long-term individual wage expectations than on year-to-year changes in wages. Finally, some of the growth in women's participation can be attributed to the fact that proportionately more women were single, divorced, or widowed.

The Role of Expectations

Along with changes in labor market opportunities and in wages, people's attitudes about work have changed greatly. Questions concerning women working appeared in at least six polls in the 1930s, and fewer than 25 percent of the respondents in any of the polls approved of married women working outside the home. In a 1960 national survey, slightly more than one-third of husbands had either favorable or qualifiedly favorable attitudes toward their wives working. By the 1980s, however, the overwhelming proportion—nearly two-thirds—of both men and women reported that it is less important for a wife to help her husband's career than to have one of her own.

Table 7-3 shows how young women's expectations about future work in the market changed between 1968 and 1979. In 1985, women surveyed in 1968 would have been between 31 and 41 years old; thus, the table also shows 1985 labor force participation rates for women in these age groups. With the dramatic increase in labor force participation rates, more women were working than had expected to work. The differences between expectations and actual later behavior were considerably greater for white than for black women, probably because the increase in labor force participation has been so much greater for white women.

TABLE 7-3.—*Young women's work expectations for age 35: Trends and current participation rates*

[Percent]

Race	Percent of young women expecting to work at age 35		1985 labor force participation rate by age	
	1968 sample	1979 sample	25-34	35-44
White	27.5	71.7	70.9	71.4
Black	55.6	85.9	72.4	74.8

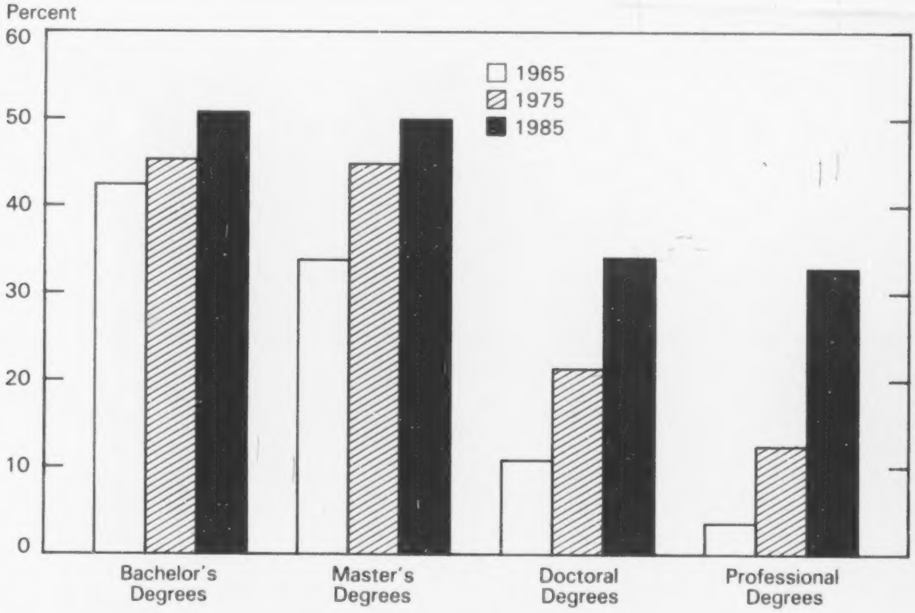
Sources: The 1968 data are from the 1968 National Longitudinal Survey of 5,000 women aged 14-24 years. The 1979 data are from the 1979 National Longitudinal Survey of Youth Labor Market Experience, a survey of over 12,000 young men and women aged 14-21 years (over 6,000 women). The tabulations exclude those answering "don't know" or "other." All survey data were weighted to a nationally representative sample. The 1985 labor force participation rates are from Department of Labor, Bureau of Labor Statistics.

What and how long women study, what jobs they take, and what occupations they choose depend, in part, upon how long and remunerative they expect their careers to be. The dramatic increases in women's employment were unanticipated. Not surprisingly, many women seriously underestimated how many years they would work in the marketplace. As a result, women, on average, were less trained for labor market activities than they would have been had they anticipated their future work histories. Today, young women expect to spend a much greater fraction of their adult lives working in the labor market than their mothers did.

Young women are changing their training and initial job plans as they anticipate greater commitment to the labor force. This is evident in the increased proportion going to college. As Chart 7-2 illustrates, women now receive about half of the bachelor's and master's and more than one-third of the doctoral degrees. The sharpest growth in the past decade has been in professional degrees. In 1985, women received 30 percent of the degrees in medicine (up from 13 percent in 1975), 21 percent in dentistry (up from 3 percent in 1975), and 38 percent in law (up from 15 percent in 1975).

Chart 7-2

Percent of Earned Degrees Received by Women



Note.—Data are for 12-month period ending June 30 of year shown. Data for professional degrees are for first professional degrees, and are primarily in law, medicine, and dentistry.

Source: Department of Education.

Women's college major choices are converging toward those of men. In 1960, 46 percent of degrees awarded to women were in education. Since then, the increased commitment of women to the labor force has led them to choose a greater variety of college majors. In the fall of 1985, only 10 percent of women beginning college intended to major in education, while 28 percent opted for business, making it the most popular major for women as well as for men.

Roughly equal numbers of male and female college graduates now major in the arts and humanities, as well as in the biological sciences and management. Although considerably fewer women major in education than before, 76 percent of education majors are women. Women represent only 13 percent of engineering majors, but a decade earlier they represented a mere 2 percent.

OCCUPATIONAL CHOICE

Work performed in the home would, under paid circumstances, be categorized in the service sector. Women made an occupational shift during the postwar period, as many left full-time homemaking. In terms of the proportions of the labor market involved, the shift away from homemaking is greater than the migration of the workforce out of agriculture that occurred earlier in this century. Both structural shifts in employment were massive and, again, the market-oriented U.S. economy accommodated them in an environment of generally rising wages.

Occupational choices seem to be driven not only by expectations regarding lifetime hours of work, but also by tradeoffs among the characteristics of different occupations. For example, individuals balance wages against job characteristics such as riskiness, effort, work environment, and fringe benefits. Characteristics such as amount of training required, usual hours, and rate of skill atrophy are also important. Women who expect to have long and continuous work careers make choices different from those who expect more disruptions in their labor market work because of family demands. Women's divergent goals are reflected in the differing characteristics of the occupations they choose. And the market provides individuals with the opportunity to choose among occupations with very different features.

The amount and type of training women acquire signal expectations for lifetime hours of work. Women who plan continuous careers are more likely to choose apprenticeship training or make specific investments in schooling as preparation for a particular occupation. The amount of additional training undertaken while employed also depends on the expected length of labor market participation, as women who expect lengthy and continuous careers are more likely to undertake career investments that enhance future earnings.

The type of training also affects working wives' occupational choices. Some couples invest more heavily in the career of the husband than of the wife; if the wife chooses to work, she must find employment wherever the family locates and is thus less likely to acquire job-specific or nontransferable skills. Similarly, occupations in which skills deteriorate or require knowledge of a rapidly changing body of information, may not be good choices for women who plan substantial interruptions in their labor market careers for marriage or childbearing. The cost of taking time off is much greater in engineering than in editing, because the decay of knowledge is much greater.

Job characteristics valued by many, especially women with children, are work-time flexibility and shorter work hours. Women have long dominated elementary and secondary school teaching, occupations that allowed them to spend summers and holidays with family. Workers in the clerical fields, where women have often been employed full time throughout the year, generally work fewer hours per week than the average full-time worker.

Physical strength, access to financing, societal expectations, and legal barriers constrain occupational choices for both men and women. Barriers to entry for women have included Federal regulations prohibiting certain work in the home, State "protective" legislation barring entry into occupations requiring heavy or dangerous work, certain military occupations (because of congressional bans on women in combat), and employer or union discrimination. Employer or union discrimination on the basis of sex, race, or age is now against the law, and virtually all State "protective" legislation has been repealed. Federal regulations still prohibit the manufacture of some types of goods within the home. The Department of Labor in 1984 partially lifted the ban and in 1986 proposed further liberalization of these rules.

Some argue that women's occupational choices have also been affected by what is broadly called sex-stereotyping of occupations. Although occupational choices of women are changing, most employed women are still found in a relatively small cluster of occupations. Women have often chosen these occupations because they require general skills that were easily transferable and could be used in the home, and because the occupations permitted the flexibility in hours or labor force discontinuity that many women wanted. Few legally valid restrictions to occupational choice remain. And as women raise their expectations about their work time in the market, they are increasingly entering occupations considered nontraditional.

OCCUPATIONAL DISTRIBUTIONS

Women's tendency to choose clerical, service, and social service fields over crafts and manufacturing is a phenomenon not confined to the United States. A study of Great Britain, Sweden, the United States, and West Germany in the 1960s and 1970s indicated that these patterns were strongest in Sweden. Gender differences in occupational choice narrowed only slightly in the United States between

1950 and 1970. During the 1970s and increasingly in the 1980s, women have been choosing a greater variety of occupations. Table 7-4 shows the percentage of women in the labor force, in the six broad census occupational groupings, and in a variety of more detailed occupations. Women are increasing their participation in highly skilled occupations that traditionally had been almost exclusively male. For example, in 1970, when 38 percent of the total workforce was female, only 5 percent of lawyers and judges were female. By 1986, women constituted 45 percent of employed workers under 35 years of age and 29 percent of lawyers and judges.

TABLE 7-4.—*Percent female in selected occupations, 1970, 1980, and 1986*

[Female workers as percent of total workers]

Occupation	1970	1980	1986	
			All	Under 35 years
Percent of employment that is female	38	43	44	45
Managerial and professional	34	41	43	49
Mathematical and computer scientists	17	26	36	41
Natural scientists	14	20	23	28
Health diagnosing occupations	8	12	15	24
Physicians	10	13	18	([1])
Health assessment and treating occupations	85	86	85	85
Registered nurses	97	96	94	([1])
Lawyers and judges	5	14	18	29
Technical, sales, and administrative support	59	64	65	66
Technicians and related support	34	44	47	48
Engineering and related technologists and technicians	9	17	18	22
Sales occupations	41	49	48	54
Administrative support, including clerical	73	77	80	80
Secretaries, stenographers, and typists	97	98	98	98
Mail and message distributing	25	30	34	40
Service occupations	60	59	61	58
Sheriffs, bailiffs, other law enforcement officers	6	13	14	([1])
Bartenders	21	44	49	([1])
Waiters and waitresses	91	88	85	([1])
Cooks, except short-order	67	57	51	([1])
Precision production, craft, and repair	7	8	9	8
Precision woodworking occupations	8	14	17	([1])
Operators, fabricators, and laborers	26	27	25	22
Motor vehicle operators	5	9	11	10
Bus drivers	28	49	50	([1])
Printing machine operators	14	27	28	([1])
Farming, forestry, and fishing	9	15	16	14

[1] Not available.

Note.—All data are based on the 1980 Census job classification system.

Sources: Department of Commerce (Bureau of the Census) and Department of Labor (Bureau of Labor Statistics).

Women are also expanding their roles as entrepreneurs. Female-operated nonfarm sole proprietorships have grown about twice as rapidly as all such proprietorships since 1977. In 1983, female entrepreneurs operated 28 percent of nonfarm sole proprietorships, up sharply from earlier periods. Most of these businesses are in areas such as retail trade, insurance, and real estate, but an increasing number are in areas considered nontraditional.

EARNINGS DIFFERENTIALS

Differences in earnings arise partly because of differences in demand for the goods and services provided by particular jobs, and partly because of differences in the number of qualified individuals willing to take those jobs. Different skills that stem from past training, work histories, motivation, and talent all contribute to variation in earnings. Continuous work histories and longer job tenures with particular employers lead to higher earnings. Jobs that begin with comparatively more on-the-job training also pay less at first than jobs that offer no training; individuals seek jobs with training because of the potential for future wage growth.

Within race and sex categories, individual characteristics (hours of work, education, age, union membership, urban location, etc.) explain some of the variation in earnings. Adding those factors to other readily measured characteristics—such as actual work experience, interruptions in work experience, tenure with employer, and occupation, job, or industry characteristics—explains about half of the earnings variation.

The average employed man has more work experience, fewer interruptions in that work experience, and longer tenure with his current employer than does his female counterpart of a comparable age. However, these differences are now beginning to narrow. For example, in 1963, women's median years of tenure with their current employer were 2.7 years less than men's; 20 years later, in 1983, the difference was 1.4 years. For women 25 to 34 years old, the tenure differences were 1.5 years and 0.6 years respectively.

Just as unexplained earnings differentials exist among men or among women whose readily measured characteristics are identical, unexplained earnings differentials also exist between men and women. These pay differences can result from the failure to measure all of the gender differences that affect market productivity, or from discrimination, or from both.

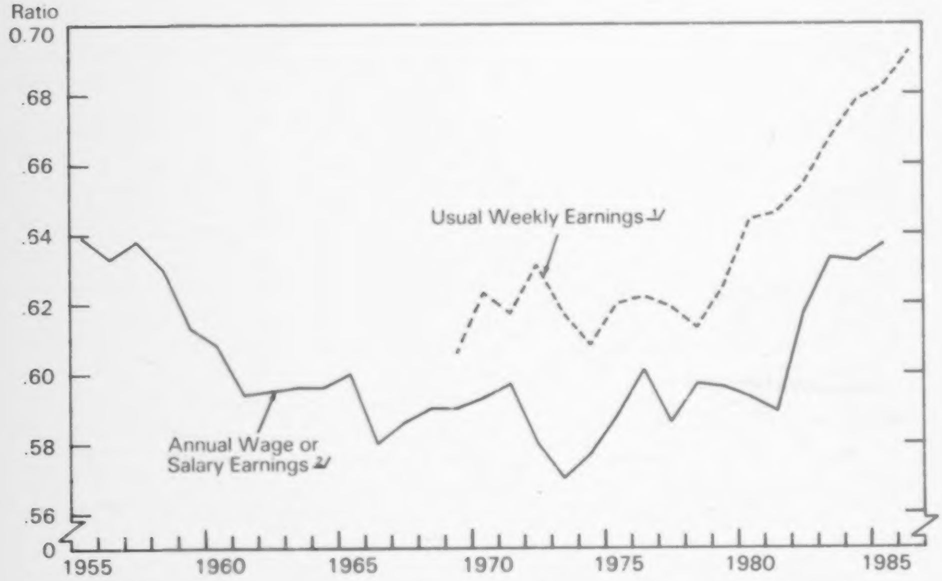
One example of a characteristic that is not generally measurable is anticipated future market work time. Such information, however, is available from the 1968 survey of young women discussed previously in this chapter. Because the survey was longitudinal and the same basic question was asked each year, it was possible to compare the earnings of women who had consistently expected to be working at age 35 with those who had not. Recent analysis of these data shows that the earnings in 1980 of women who had answered the question in the affirmative throughout the first 7 years of the survey (1968 through 1975) were almost 30 percent higher than the earnings of women who had not, but who were comparable in other respects. No doubt many of those who expected to be working continuously chose different occupations and made greater investments in their skills and careers than those who believed otherwise.

TRENDS IN THE PAY GAP

Two data series, illustrated in Chart 7-3, are often used to compare male and female earnings. The first series, the ratio of female to male median wage or salary income for year-round, full-time workers, was 58 percent in 1939 (not shown), rose to 64 percent in the mid-1950s and then fell to 58 percent in the mid-1960s. From the mid-1960s to 1981, it drifted in a narrow range. Since 1981, it has begun to climb, reaching 64 percent in 1985. The ratio for the second data series, median usual weekly earnings of full-time wage and salary workers, shows a similar pattern for the available time period. Since 1979, it has risen steadily, reaching 69 percent in 1986. Although both series are for full-time workers, gender differences occur in hours worked even for full-time workers. In 1985, full-time women workers averaged 6 percent fewer hours than full-time male workers.

Chart 7-3

Ratio of Female to Male Earnings for Full-Time Workers



1/ Median usual weekly earnings of all full-time workers, 16 years and over. Excludes self-employed persons whose businesses are incorporated. For details on data consistency, see Bureau of Labor Statistics Bulletin 2239, February 1986.

2/ Median wage or salary income of year-round, full-time, civilian workers (14 years and over through 1978 and 15 years and over after 1978). Self-employed persons are excluded. Data beginning 1975 are not strictly comparable with earlier data.

Sources: Department of Commerce, Department of Labor, and Council of Economic Advisers.

Recent research has examined the reasons why the ratio of median earnings did not rise until the 1980s. The 1950s, 1960s, and 1970s were decades of increasing female participation in the labor force. The sharp increases in market participation by women with little previous market work experience depressed the average experience level of women workers for much of the postwar period, widening the experience gap between the typical male and female worker. A modest reduction in the experience gap occurred in the 1970s, particularly among younger workers, but by 1980, a typical employed female had only a few months more experience than in 1940. Education played a somewhat similar role as the schooling levels of male workers increased relative to female workers in the 1950s and 1960s, stimulated, in part, by the GI bill. As the work experience of women relative to men as well as the educational differential between working men and women widened, the median earnings ratio fell. Because both experience and educational differences are now narrowing, the ratio is rising, as Chart 7-3 shows. And the underlying trends in women's work commitments discussed in this chapter suggest that the ratio should continue to rise.

The pay gap is smaller for younger workers. Table 7-5 shows the ratio of female to male earnings for full-time, year-round workers in different age groups. Earnings ratios are not only higher, but are increasing rapidly for younger workers.

TABLE 7-5.—*Earnings of females as percent of earnings of males, by age, 1979, 1982, and 1985*

[Percent]

Year	Age of workers			
	20-24 years	25-34 years	35-44 years	45-54 years
1979	76.7	67.5	58.2	57.0
1982	82.4	72.0	61.1	60.0
1985	85.7	75.1	63.2	59.6

Note.—Data relate to median usual weekly earnings of full-time wage and salary workers.
Source: Department of Labor, Bureau of Labor Statistics.

As mentioned above, employed men and women differ in many of the basic characteristics that influence earnings, such as labor market experience and employee tenure. When these differences in characteristics are accounted for, almost half of the gap between men and women is explained. In general, studies that sample only younger workers or those in similar jobs find smaller pay gaps. Some recent research, incorporating work expectations of men and women into an analysis of the pay gap, suggests that as much as 90 percent of the differences in male and female earnings can be explained when gender differences in work expectations are included in the calculations. Accurate measurement of work expectations, however, is extremely difficult, and these results should be considered tentative.

Discrimination

Some observers attribute all, or almost all, of the unexplained portion of the wage gap between women and men to discrimination. Other observers attribute all, or almost all, to unmeasured or difficult-to-measure differences in characteristics between men and women. There is no consensus on the magnitude of discrimination. Discrimination is illegal. The Equal Pay Act of 1963 and Title VII of the Civil Rights Act of 1964 contain remedies for discrimination. The Equal Pay Act requires equal pay for equal work and thus outlaws gender wage discrimination. The 1964 legislation prohibits gender barriers to entry, and thus outlaws discrimination in hiring or promotion.

Discrimination also reduces gross national product. Resources are allocated most efficiently when prices are determined by the free interplay of supply and demand. Barriers to entry based upon characteristics such as sex, age, or race, impede the workings of the market, reduce allocative efficiency, and retard economic growth. These barriers are also costly to business. A firm that hires or promotes a less competent man over a more competent woman has higher costs of production than one that hires or promotes the most competent person. Barriers may include unequal educational opportunity or occupational, union, and trade association restrictions. Breaking down barriers that remain and promoting equal opportunity are commitments of this Administration.

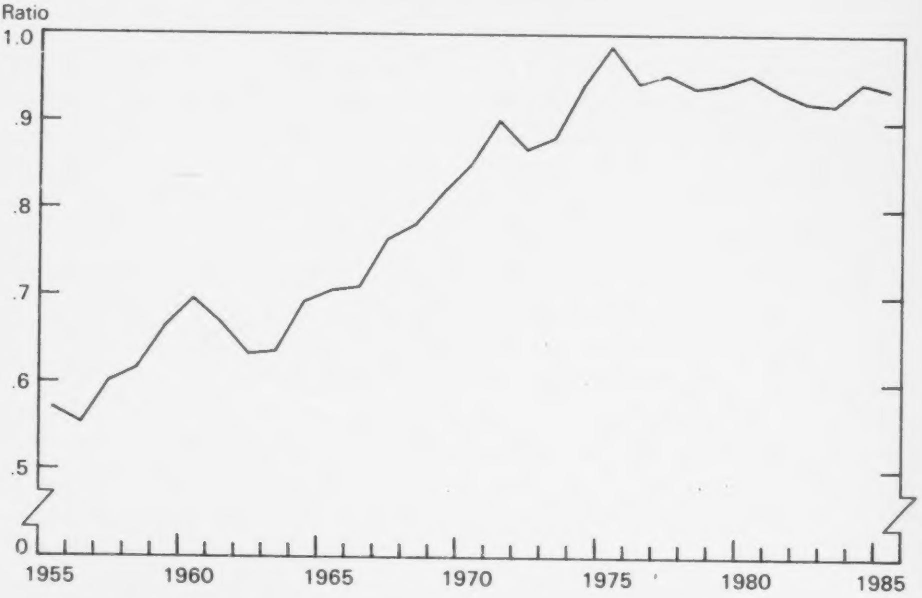
The Earnings of Black Women

The relative constancy of the ratio of median earnings for all full-time workers disguises the sharp increases in earnings experienced by black women in the postwar period. Since black women's earnings are not available in separate series until the late 1960s, Chart 7-4 illustrates the earnings ratio of black and other women to white women from the mid-1950s to the present. (In years when black and other female earnings and black earnings are both available, the two series are virtually identical.) While Chart 7-1 showed sharp real increases in the earnings of all women, Chart 7-4 shows that the earnings of women in the black and other category were growing considerably faster than the earnings of all women.

There are at least three important reasons for this extraordinary increase in black women's earnings. First, black women had high labor force participation rates throughout the postwar period, and the increases in their participation were much smaller than those for white women. The median work experience of employed black women grew during the period because it was not diluted by a high proportion of new entrants, and this contributed to the growth in black women's earnings.

Chart 7-4

Ratio of Black and Other Women's Earnings to White Women's Earnings



Note.—Data are median wage or salary income of year-round, full-time, civilian workers (14 years and over through 1978 and 15 years and over after 1978). Self-employed persons are excluded. Black women constitute the great majority of the category black and other women.

Data beginning 1975 are not strictly comparable with earlier data.

Sources: Department of Commerce and Council of Economic Advisers.

Second, and more important, schooling levels of black women workers increased sharply throughout the period. In 1940, only about 7 percent of black women over the age of 25 had completed high school. By 1960, the percent had almost tripled and today it is about 60 percent. Finally, in the early postwar period, a great majority of employed black women worked in only two occupations, private household worker and farm laborer. While in 1940 more than 70 percent of black working women were in these two occupations, by 1960 the fraction had fallen to below 40 percent. By 1970, the fraction was below 20 percent; today it is about 5 percent.

The increase in black female education, and the changes in their occupational distribution in the past 40 years have been dramatic. Real wage changes for black women have been larger than those for any other group. In 1939, the earnings ratio depicted in Chart 7-4 was 0.38; by 1960, it was 0.70; and since the mid-1970s, the ratio has fluctuated between 92 and 99 percent.

The growth in the real earnings of black and other women was as rapid in the late 1950s and the early 1960s as it has been since 1964. The increases in black women's schooling, and their movement out of the occupations of private household worker and farm laborer, contributed significantly to the growth in these earnings.

CONCLUSION

This chapter tells two stories. The first is about women and their shift from work in the home to work in the market. The number of women in the labor force has tripled, women's real earnings are rising, and women are increasingly entering higher paid occupations. Women have successfully integrated work in the market with work in the home, making important contributions to both their family's income and the Nation's output.

The second story, which underlies the story of women's economic achievements, is about the adaptability and flexibility of U.S. labor markets in accommodating such a major structural change. Not only has the economy created over 30 million additional jobs filled by women since World War II, but it has also created jobs that interest and attract women: in business and the professions, science and technology, and the service sector. The market produced these jobs while still providing rising real wages and incomes for both men and women.

The success of the responsive and flexible U.S. labor markets has not been confined to adapting to increasing numbers of women. Last year the Council of Economic Advisers chronicled the labor market success of immigrants. Since 1950, the United States has absorbed about 13 million legal immigrants. During the same time, 4 million workers left farming and found other jobs. The market provided nonfarm jobs for those who left agriculture, as well as jobs for immigrants who often knew neither the English language nor American customs. It did this without major government programs to force accommodation.

The central conclusion that can be drawn from this chapter, as from many other sections of this *Report*, is clear. The success of the markets is reflected in their adaptability. In the labor market, as with all markets, it is important to retain this ability to respond to change. Regulations to mandate wages or benefits would, even if enacted with the best of intentions, restrict this flexibility and inhibit the ability of markets to adapt. In contrast, free and flexible labor markets provide employment opportunities for new workers, even in the face of enormous and rapid structural change.

As this *Report* demonstrates, the success of the U.S. economy in creating employment opportunities, increasing national income, and raising real living standards begins with reliance upon private enterprise and a competitive-market system. The incentives for individual effort and initiative generated by this system provide the essential stimulus for economic progress. By facilitating the operation of this system, government policy most effectively contributes to the goals specified 40 years ago in the Employment Act of 1946: ". . . maximum employment, production and purchasing power."

Appendix A

REPORT TO THE PRESIDENT ON THE ACTIVITIES OF THE COUNCIL OF ECONOMIC ADVISERS DURING 1986

LETTER OF TRANSMITTAL

COUNCIL OF ECONOMIC ADVISERS,
Washington, D.C., December 31, 1986.

MR. PRESIDENT:

The Council of Economic Advisers submits this report on its activities during the calendar year 1986 in accordance with the requirements of the Congress, as set forth in section 10(d) of the Employment Act of 1946 as amended by the Full Employment and Balanced Growth Act of 1978.

Sincerely,

Beryl W. Sprinkel, *Chairman*
Thomas Gale Moore, *Member*
Michael L. Mussa, *Member*

Council Members and their Dates of Service

Name	Position	Oath of office date	Separation date
Edwin G. Nourse	Chairman	August 9, 1946	November 1, 1949.
Leon H. Keyserling	Vice Chairman	August 9, 1946	
	Acting Chairman	November 2, 1949	
	Chairman	May 10, 1950	January 20, 1953.
John D. Clark	Member	August 9, 1946	
	Vice Chairman	May 10, 1950	February 11, 1953.
Roy Blough	Member	June 29, 1950	August 20, 1952.
Robert C. Turner	Member	September 8, 1952	January 20, 1953.
Arthur F. Burns	Chairman	March 19, 1953	December 1, 1956.
Neil H. Jacoby	Member	September 15, 1953	February 9, 1955.
Walter W. Stewart	Member	December 2, 1953	April 29, 1955.
Raymond J. Saulnier	Member	April 4, 1955	
	Chairman	December 3, 1956	January 20, 1961.
Joseph S. Davis	Member	May 2, 1955	October 31, 1958.
Paul W. McCracken	Member	December 3, 1956	January 31, 1959.
Karl Brandt	Member	November 1, 1958	January 20, 1961.
Henry C. Wallich	Member	May 7, 1959	January 20, 1961.
Walter W. Heller	Chairman	January 29, 1961	November 15, 1964.
James Tobin	Member	January 29, 1961	July 31, 1962.
Kermit Gordon	Member	January 29, 1961	December 27, 1962.
Gardner Ackley	Member	August 3, 1962	
	Chairman	November 16, 1964	February 15, 1968.
John P. Lewis	Member	May 17, 1963	August 31, 1964.
Otto Eckstein	Member	September 2, 1964	February 1, 1966.
Arthur M. Okun	Member	November 16, 1964	
	Chairman	February 15, 1968	January 20, 1969.
James S. Duesenberry	Member	February 2, 1966	June 30, 1968.
Merton J. Peck	Member	February 15, 1968	January 20, 1969.
Warren L. Smith	Member	July 1, 1968	January 20, 1969.
Paul W. McCracken	Chairman	February 4, 1969	December 31, 1971.
Hendrik S. Houthakker	Member	February 4, 1969	July 15, 1971.
Herbert Stein	Member	February 4, 1969	
	Chairman	January 1, 1972	August 31, 1974.
Ezra Solomon	Member	September 9, 1971	March 26, 1973.
Marina v.N. Whitman	Member	March 13, 1972	August 15, 1973.
Gary L. Seevers	Member	July 23, 1973	April 15, 1975.
William J. Fellner	Member	October 31, 1973	February 25, 1975.
Alan Greenspan	Chairman	September 4, 1974	January 20, 1977.
Paul W. MacAvoy	Member	June 13, 1975	November 15, 1976.
Burton G. Malkiel	Member	July 22, 1975	January 20, 1977.
Charles L. Schultze	Chairman	January 22, 1977	January 20, 1981.
William D. Nordhaus	Member	March 18, 1977	February 4, 1979.
Lyle E. Gramley	Member	March 18, 1977	May 27, 1980.
George C. Eads	Member	June 6, 1979	January 20, 1981.
Stephen M. Goldfeld	Member	August 20, 1980	January 20, 1981.
Murray L. Weidenbaum	Chairman	February 27, 1981	August 25, 1982.
William A. Niskanen	Member	June 12, 1981	March 30, 1985.
Jerry L. Jordan	Member	July 14, 1981	July 31, 1982.
Martin Feldstein	Chairman	October 14, 1982	July 10, 1984.
William Poole	Member	December 10, 1982	January 20, 1985.
Beryl W. Sprinkel	Chairman	April 18, 1985	
Thomas Gale Moore	Member	July 1, 1985	
Michael L. Mussa	Member	August 18, 1986	

Report to the President on the Activities of the Council of Economic Advisers During 1986

The Council of Economic Advisers was established by the Employment Act of 1946 to provide economic analysis and advice to the President and thus to assist in the development and implementation of national economic policies. The Council also advises the President on other matters affecting the performance of the Nation's economy.

Beryl W. Sprinkel and Thomas Gale Moore continued to serve as Council Members in 1986, with Dr. Sprinkel as Chairman. Michael L. Mussa, the William H. Abbott Professor of International Business of the University of Chicago, became a Member of the Council on August 18, 1986.

MACROECONOMIC POLICIES

As is its tradition, the Council devoted much of its time during 1986 to assisting the President in formulating economic policy objectives and designing programs to implement them. In this regard, the Chairman kept the President informed on a continuing basis of important macroeconomic developments and other major policy issues. This included briefings on various international issues in preparation for the Tokyo Economic Summit.

The Council chaired an interagency forecasting group, also including the Department of the Treasury and the Office of Management and Budget, which developed economic projections that were presented to the President and used in the Federal budget. The Council also actively participated in discussions of macroeconomic policy issues before the Cabinet-level Economic Policy Council, including the economic effects of tax reform, the causes of and remedies for trade and payments imbalances, and the need for international policy coordination, including the need for budget reform in the United States and for stronger, internally led economic growth abroad.

The Chairman of the Council continued to serve as the Chairman of the Economic Policy Committee of the Organization for Economic Cooperation and Development (OECD). The Council also actively participated in other OECD fora, working on a variety of issues, including an analysis of macroeconomic performance in a multinational context, problems of international policy coordination and payments imbalances, and barriers to economic development, including structural rigidities.

The Council maintained particularly close attention to economic developments in Japan. The Council participated in the ongoing U.S.-Japan Sub-Cabinet Meetings and the newly formed Structural Dialogue, and held its annual discussion with its Japanese counterpart, the Economic Planning Agency, in Tokyo.

MICROECONOMIC POLICIES

A wide variety of microeconomic issues received Council attention during the year. The Council actively participated in the Cabinet-level Domestic Policy Council and the Economic Policy Council, dealing with such issues as international trade policy and remedies for unfair trade practices, problems in the agricultural sector including farm credit, privatization, alternatives to Federal regulation, antitrust reform, catastrophic health insurance, welfare reform, tort reform, energy policy and security, financial markets and institutions, airport landing rights and other transportation regulatory issues, communications regulatory issues, and tax policy.

The Council also participated actively in various OECD committees, working on a variety of issues including agricultural policy and trade, tax policy, international financial market integration, and a variety of labor issues.

PUBLIC INFORMATION

The Council's *Annual Report* is the principal medium through which the Council informs the public of its work and its views. It is also an important vehicle for presenting the Administration's domestic and international economic policies. Annual distribution of the *Report* in recent years has averaged about 50,000 copies. The Council also assumes primary responsibility for the monthly *Economic Indicators*, which is issued by the Joint Economic Committee of the Congress and has a distribution of approximately 10,000. Information is also provided to the public through speeches and other public appearances by the Council Chairman, Members, and senior staff.

ORGANIZATION AND STAFF OF THE COUNCIL

OFFICE OF THE CHAIRMAN

The Chairman is responsible for communicating the Council's views to the President. This role is performed through personal discussions with the President, Cabinet-level meetings with the President, and written reports to him on economic developments. The Chairman also represents the Council at Cabinet meetings, meetings of the Economic Policy Council and Domestic Policy Council, daily

White House senior staff meetings, weekly issues lunches with the President, and at many other formal and informal meetings of senior government officials. The Chairman guides and oversees the work of the Council and exercises ultimate responsibility for the work of the Members and the professional staff.

COUNCIL MEMBERS

Members of the Council are involved in the full range of issues within the Council's purview, and are responsible for the regular supervision of the work of the professional staff. Members represent the Council at a wide variety of interagency and international meetings and assume major responsibility for initiating issues for Council attention.

The small size of the Council permits the Council Chairman and Members to work as a team on most policy issues. There was, however, an informal division of subject matter in 1986. Dr. Mussa has been primarily responsible for domestic and international macroeconomic analysis and economic projections. Dr. Moore has been primarily responsible for microeconomic and sectoral analysis and regulatory issues.

PROFESSIONAL STAFF

The professional staff of the Council consists of the Special Assistant, the Senior Statistician, 12 senior staff economists, 2 staff economists, 4 junior staff economists, and 1 research assistant. The professional staff and their respective areas of concentration at the end of 1986 were:

Special Assistant to the Chairman

Margot E. Machol

Senior Staff Economists

Richard H. Clarida	Macroeconomics and International Finance
Stephen J. DeCanio	Energy, Environment, and Regulation
J. David Germany	International Finance and Macroeconomics
Arlene S. Holen	Labor, Health, and Regulation
Steven L. Husted	International Trade and Finance
Carol A. Leisenring	Macroeconomics and Monetary Policy
Randall P. Mariger	Public Finance and Taxation
Aline O. Quester	Labor, Education, and Welfare
Gordon C. Rausser	Agriculture, Trade, and Finance
J. Gregory Sidak	Law and Economics
Peter M. Taylor	Macroeconomics and Forecasting
Susan E. Woodward	Financial Markets and Institutions

Statistician

Catherine H. Furlong	Senior Statistician

Staff Economists

Edward T. Gullason	General Microeconomics and Labor
Ellen L. Hughes-Cromwick	Macroeconomics and Money

Junior Staff Economists

Diana E. Furchtgott-Roth	Public Finance and Privatization
Douglas A. Irwin	International Trade, Finance, and Agriculture
Marjorie B. Rose	International Finance and Macroeconomics
Darrell L. Williams	Industrial Organization and Finance

Research Assistant

Lisa E. Bernstein	General Economics and Regulation

Mrs. Furlong manages the Statistical Office assisted by Natalie V. Rentfro, Linda A. Reilly, and Deborah D. Miller. They administer the Council's statistical information system, overseeing the publication of the *Economic Indicators* and the statistical appendix to the *Economic Report,* as well as the verification of statistics in memoranda, testimony, and speeches.

Joseph Foote provided editorial assistance in the preparation of the 1987 *Economic Report.*

Three former staff members returned in January to assist in the preparation of the 1987 *Report*: S. Dean Furbush (junior staff economist), Rhonda L. Philopoulos (research assistant), and Hannah R. Hopkins (student aide). David K. Carlson (research assistant) also continued to provide support through the *Report's* preparation. Sarah E. Jeffries (research assistant), Daniel J. Mullarkey (student intern), and Dorothy Bagovich (statistical assistant) joined the staff in January to work on the *Report.*

SUPPORTING STAFF

The Administrative Office, which provides general support for the Council's activities, consists of Elizabeth A. Kaminski, Staff Assistant to the Council, and Catherine Fibich, Administrative Assistant.

The secretaries for the Council during 1986 were Lisa D. Branch, Bonnie D. Brown, Audrey L. Carlson, Mary E. Jones, Sandra F. Medwid, Sheila J. Moat, Margaret L. Snyder, Suzanne M. Tudor, and Alice H. Williams.

DEPARTURES

The Council's senior staff economists, in most cases, are on leave of absence from faculty positions at academic institutions, or are from other government agencies or research institutions. Their tenure with the Council is usually limited to 1 or 2 years. Many of the senior staff economists who resigned during the year returned to their previous affiliations. They are: Dallas S. Batten (Federal Reserve Bank of St. Louis), Robert G. Chambers (University of Maryland), John H. Mutti (University of Wyoming), and Martin B. Zimmerman (University of Michigan). Others went on to new positions. They are: Lincoln F. Anderson (Bear, Stearns, and Co.), Joseph R. Antos (Department of Health and Human Services), Robert E. Keleher (Board of Governors of the Federal Reserve System), and Charles E. Stuart (Nationalekonomiska, Lund, Sweden).

Staff economists usually have recently completed their dissertations and spend a year at the Council as preparation for their professional careers. Junior staff economists generally are graduate students who spend 1 year with the Council and then return to complete their dissertations. Those who returned to their graduate studies in 1986 are: David S. Bizer (Stanford University), Catherine A. Bonser-Neal (University of Chicago), Phillip A. Braun (University of Chicago), S. Dean Furbush (University of Maryland), and James V. Stout (University of Maryland). Anne Caple, research assistant, resigned to continue graduate studies at Southern Methodist University.

In addition, a number of other staff provided support to the Council during the year. Kim Finethy (Bates University) served as an intern during the spring of 1986 and David S. Clapp and John H. Neumiller (Lawrence University) served as interns during the fall of 1986. David K. Carlson (University of Maryland) served as a research assistant during the summer and fall of 1986 and Rhonda Philopoulos (Mt. Holyoke College) served as a research assistant during the summer of 1986. Donald R. Brown served as an administrative aide during the winter of 1986, Lorraine A. Ambrosio served as a student aide during the spring of 1986, and Hannah R. Hopkins served as a student aide during the summer of 1986.

Appendix B

STATISTICAL TABLES RELATING TO INCOME, EMPLOYMENT, AND PRODUCTION

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General Notes

Detail in these tables may not add to totals because of rounding.

Unless otherwise noted, all dollar figures are in current dollars.

Symbols used:

ᵖ Preliminary.

— —Not available (also, not applicable).

Data in these tables reflect revisions made by the source agencies during 1986.

NATIONAL INCOME OR EXPENDITURE

TABLE B-1.—*Gross national product, 1929–86*

[Billions of dollars, except as noted; quarterly data at seasonally adjusted annual rates]

Year or quarter	Gross national product	Personal consumption expenditures				Gross private domestic investment						
		Total	Durable goods	Nondurable goods	Services	Total	Fixed investment					Change in business inventories
							Total	Nonresidential			Residential	
								Total	Structures	Producers' durable equipment		
1929	103.9	77.3	9.2	37.7	30.4	16.7	14.9	11.0	5.5	5.5	4.0	1.7
1933	56.0	45.8	3.5	22.3	20.1	1.6	3.1	2.5	1.1	1.4	.6	−1.6
1939	91.3	67.0	6.7	35.1	25.2	9.5	9.1	6.1	2.2	3.9	3.0	.4
1940	100.4	71.0	7.8	37.0	26.2	13.4	11.2	7.7	2.6	5.2	3.5	2.2
1941	125.5	80.8	9.7	42.9	28.3	18.3	13.8	9.7	3.3	6.4	4.1	4.5
1942	159.0	88.6	6.9	50.8	31.0	10.3	8.5	6.3	2.2	4.1	2.2	1.8
1943	192.7	99.5	6.5	58.6	34.3	6.2	6.9	5.4	1.8	3.7	1.4	−.6
1944	211.4	108.2	6.7	64.3	37.2	7.7	8.7	7.4	2.4	5.0	1.4	−1.0
1945	213.4	119.6	8.0	71.9	39.7	11.3	12.3	10.6	3.3	7.3	1.7	−1.0
1946	212.4	143.9	15.8	82.7	45.4	31.5	25.1	17.3	7.4	9.9	7.8	6.4
1947	235.2	161.9	20.4	90.9	50.6	35.0	35.5	23.5	8.1	15.3	12.1	−.5
1948	261.6	174.9	22.9	96.6	55.5	47.1	42.4	26.8	9.5	17.3	15.6	4.7
1949	260.4	178.3	25.0	94.9	58.4	36.5	39.5	24.9	9.2	15.7	14.6	−3.1
1950	288.3	192.1	30.8	98.2	63.2	55.1	48.3	27.8	10.0	17.8	20.5	6.8
1951	333.4	208.1	29.9	109.2	69.0	60.5	50.2	31.8	11.9	19.9	18.4	10.2
1952	351.6	219.1	29.3	114.7	75.1	53.5	50.5	31.9	12.2	19.7	18.6	3.1
1953	371.6	232.6	32.7	117.8	82.1	54.9	54.5	35.1	13.6	21.5	19.4	.4
1954	372.5	239.8	32.1	119.7	88.0	54.1	55.7	34.7	13.9	20.8	21.1	−1.6
1955	405.9	257.9	38.9	124.7	94.3	69.7	64.0	39.0	15.2	23.9	25.0	5.7
1956	428.2	270.6	38.2	130.8	101.6	72.7	68.0	44.5	18.2	26.3	23.5	4.6
1957	451.0	285.3	39.7	137.1	108.5	71.1	69.7	47.5	18.9	28.6	22.2	1.4
1958	456.8	294.6	37.2	141.7	115.7	63.6	65.1	42.4	17.5	24.9	22.7	−1.5
1959	495.8	316.3	42.8	148.5	125.0	80.2	74.4	46.3	18.0	28.3	28.1	5.8
1960	515.3	330.7	43.5	153.2	134.0	78.2	75.1	48.8	19.2	29.7	26.3	3.1
1961	533.8	341.1	41.9	157.4	141.8	77.1	74.7	48.3	19.4	28.9	26.4	2.4
1962	574.6	361.9	47.0	163.8	151.1	87.6	81.5	52.5	20.5	32.1	29.0	6.1
1963	606.9	381.7	51.8	169.4	160.6	93.1	87.3	55.2	20.8	34.4	32.1	5.8
1964	649.8	409.3	56.8	179.7	172.8	99.6	94.2	61.4	22.7	38.7	32.8	5.4
1965	705.1	440.7	63.5	191.9	185.4	116.2	106.2	73.1	27.4	45.8	33.1	9.9
1966	772.0	477.3	68.5	208.5	200.3	128.6	114.4	83.5	30.5	53.0	30.9	14.2
1967	816.4	503.6	70.6	216.9	216.0	125.7	115.4	84.4	30.7	53.7	31.1	10.3
1968	892.7	552.5	81.0	235.0	236.4	137.0	129.1	91.4	32.9	58.5	37.7	7.9
1969	963.9	597.9	86.2	252.2	259.4	153.2	143.4	102.3	37.1	65.2	41.2	9.8
1970	1,015.5	640.0	85.7	270.3	284.0	148.8	145.7	105.2	39.2	66.1	40.5	3.1
1971	1,102.7	691.6	97.6	283.3	310.7	172.5	164.7	109.6	40.9	68.7	55.1	7.8
1972	1,212.8	757.6	111.2	305.1	341.3	202.0	191.5	123.0	44.5	78.5	68.6	10.5
1973	1,359.3	837.2	124.7	339.6	373.0	238.8	219.2	145.9	51.4	94.5	73.3	19.6
1974	1,472.8	916.5	123.8	380.9	411.9	240.8	225.4	160.6	57.0	103.6	64.8	15.4
1975	1,598.4	1,012.8	135.4	416.2	461.2	219.6	225.2	162.9	56.3	106.6	62.3	−5.6
1976	1,782.8	1,129.3	161.5	452.0	515.9	277.7	261.7	180.0	60.1	119.9	81.7	16.0
1977	1,990.5	1,257.2	184.5	490.4	582.3	344.1	322.8	214.2	66.7	147.4	108.6	21.3
1978	2,249.7	1,403.5	205.6	541.8	656.1	416.8	388.2	259.0	81.0	178.0	129.2	28.6
1979	2,508.2	1,566.8	219.0	613.2	734.6	454.8	441.9	302.8	99.5	203.3	139.1	13.0
1980	2,732.0	1,732.6	219.3	681.4	831.9	437.0	445.3	322.8	113.9	208.9	122.5	−8.3
1981	3,052.6	1,915.1	239.9	740.6	934.7	515.5	491.5	369.2	138.5	230.7	122.3	24.0
1982	3,166.0	2,050.7	252.7	771.0	1,027.0	447.3	471.8	366.7	143.3	223.4	105.1	−24.5
1983	3,405.7	2,234.5	289.1	816.7	1,128.7	502.3	509.4	356.9	124.0	232.8	152.5	−7.1
1984	3,765.0	2,428.2	331.2	870.1	1,227.0	662.1	598.0	416.5	139.3	277.3	181.4	64.1
1985	3,998.1	2,600.5	359.3	905.1	1,336.1	661.1	650.0	458.2	154.8	303.4	191.8	11.1
1986 ᵖ	4,208.5	2,762.4	388.3	932.7	1,441.3	686.4	675.1	458.5	143.6	314.9	216.6	11.4
1982: IV	3,212.5	2,117.0	263.8	786.6	1,066.5	409.6	469.5	354.9	137.6	217.3	114.7	−59.9
1983: IV	3,545.8	2,315.8	310.0	837.9	1,167.9	579.8	548.8	383.9	127.4	256.5	164.9	31.0
1984: I	3,670.9	2,363.8	321.2	855.7	1,186.9	659.5	564.0	388.2	129.7	258.4	175.8	95.5
II	3,743.8	2,416.1	331.3	870.3	1,214.5	657.5	597.6	413.3	139.1	274.1	184.4	59.9
III	3,799.7	2,445.6	331.8	873.9	1,239.9	670.3	605.8	421.8	141.4	280.4	184.0	64.4
IV	3,845.6	2,487.2	340.4	880.3	1,266.5	661.1	624.4	442.9	146.7	296.2	181.5	36.7
1985: I	3,909.3	2,530.9	347.7	888.2	1,294.9	650.6	625.2	439.8	150.7	289.1	185.4	25.4
II	3,965.0	2,576.0	354.0	902.3	1,319.7	667.1	648.0	459.2	156.1	303.1	188.8	19.1
III	4,030.5	2,627.1	373.3	907.4	1,346.4	657.4	654.3	459.8	155.0	304.7	194.5	3.1
IV	4,087.7	2,667.9	362.0	922.6	1,383.2	669.5	672.6	474.0	157.2	316.8	198.6	−3.1
1986: I	4,149.2	2,697.9	360.8	929.7	1,407.4	708.3	664.4	459.2	154.6	304.6	205.3	43.8
II	4,175.6	2,732.0	373.9	928.4	1,429.8	687.3	672.8	457.5	141.5	316.0	215.3	14.5
III	4,240.7	2,799.8	414.5	932.8	1,452.4	675.8	680.3	459.0	139.5	319.5	221.3	−4.5
IV ᵖ	4,268.4	2,819.9	404.2	940.0	1,475.7	674.5	682.7	458.1	138.6	319.5	224.6	−8.3

See next page for continuation of table.

TABLE B-1.—*Gross national product, 1929–86*—Continued

[Billions of dollars, except as noted; quarterly data at seasonally adjusted annual rates]

Year or quarter	Net exports of goods and services			Government purchases of goods and services					Final sales	Percent change from preceding period	
					Federal						
	Net exports	Exports	Imports	Total	Total	National defense	Nondefense	State and local		Gross national product	Final sales
1929	1.1	7.1	5.9	8.9	1.5			7.4	102.2		
1933	.4	2.4	2.1	8.3	2.2			6.1	57.6	−4.2	−5.5
1939	1.2	4.6	3.4	13.6	5.2	1.3	3.9	8.3	90.9	7.0	5.4
1940	1.8	5.4	3.7	14.2	6.1	2.3	3.9	8.1	98.3	10.0	8.1
1941	1.5	6.1	4.7	25.0	17.0	13.8	3.2	8.0	121.0	25.0	23.2
1942	.2	5.0	4.8	59.9	52.0	49.4	2.6	7.8	157.2	26.6	29.9
1943	−1.9	4.6	6.5	88.9	81.4	79.8	1.6	7.5	193.4	21.2	23.0
1944	−1.7	5.5	7.2	97.1	89.4	87.5	2.0	7.6	212.3	9.7	9.8
1945	−.5	7.4	7.9	83.0	74.8	73.7	1.1	8.2	214.4	.9	1.0
1946	7.8	15.2	7.3	29.1	19.2	16.4	2.8	9.9	206.0	−.5	−3.9
1947	11.9	20.3	8.3	26.4	13.6	10.0	3.6	12.8	235.7	10.8	14.4
1948	7.0	17.5	10.6	32.6	17.3	11.3	6.0	15.3	256.9	11.2	9.0
1949	6.5	16.4	9.8	39.0	21.1	13.9	7.2	18.0	263.4	−.5	2.5
1950	2.2	14.5	12.3	38.8	19.1	14.3	4.7	19.8	281.4	10.7	6.8
1951	4.5	19.8	15.3	60.4	38.6	33.8	4.8	21.8	323.2	15.7	14.8
1952	3.2	19.2	16.0	75.8	52.7	46.2	6.5	23.1	348.6	5.5	7.9
1953	1.3	18.1	16.8	82.8	57.9	49.0	8.9	24.8	371.1	5.7	6.5
1954	2.6	18.8	16.3	76.0	48.4	41.6	6.8	27.7	374.1	.2	.8
1955	3.0	21.1	18.1	75.3	44.9	39.0	6.0	30.3	400.2	9.0	7.0
1956	5.3	25.2	19.9	79.7	46.4	40.7	5.7	33.3	423.6	5.5	5.8
1957	7.3	28.2	20.9	87.3	50.5	44.6	5.9	36.9	449.6	5.3	6.1
1958	3.3	24.4	21.1	95.4	54.5	46.3	8.3	40.8	458.3	1.3	1.9
1959	1.5	25.0	23.5	97.9	54.6	46.4	8.2	43.3	490.0	8.5	6.9
1960	5.9	29.9	24.0	100.6	54.4	45.3	9.2	46.1	512.3	3.9	4.6
1961	7.2	31.1	23.9	108.4	58.2	47.9	10.2	50.2	531.4	3.6	3.7
1962	6.9	33.1	26.2	118.2	64.6	52.1	12.6	53.5	568.5	7.6	7.0
1963	8.2	35.7	27.5	123.8	65.7	51.5	14.2	58.1	601.1	5.6	5.7
1964	10.9	40.5	29.6	130.0	66.4	50.4	16.0	63.5	644.4	7.1	7.2
1965	9.7	42.9	33.2	138.6	68.7	51.0	17.7	69.9	695.2	8.5	7.9
1966	7.5	46.6	39.1	158.6	80.4	62.0	18.3	78.2	757.8	9.5	9.0
1967	7.4	49.5	42.1	179.7	92.7	73.4	19.3	87.0	806.1	5.8	6.4
1968	5.5	54.8	49.3	197.7	100.1	79.1	21.0	97.6	884.8	9.3	9.8
1969	5.6	60.4	54.7	207.3	100.0	78.9	21.1	107.2	954.1	8.0	7.8
1970	8.5	68.9	60.5	218.2	98.8	76.8	22.0	119.4	1,012.3	5.4	6.1
1971	6.3	72.4	66.1	232.4	99.8	74.1	25.8	132.5	1,094.9	8.6	8.2
1972	3.2	81.4	78.2	250.0	105.8	77.4	28.4	144.2	1,202.3	10.0	9.8
1973	16.8	114.1	97.3	266.5	106.4	77.5	28.9	160.1	1,339.7	12.1	11.4
1974	16.3	151.5	135.2	299.1	116.2	82.6	33.6	182.9	1,457.4	8.3	8.8
1975	31.1	161.3	130.3	335.0	129.2	89.6	39.6	205.9	1,604.1	8.5	10.1
1976	18.8	177.7	158.9	356.9	136.3	93.4	42.9	220.6	1,766.8	11.5	10.1
1977	1.9	191.6	189.7	387.3	151.1	100.9	50.3	236.2	1,969.2	11.7	11.5
1978	4.1	227.5	223.4	425.2	161.8	108.9	52.9	263.4	2,221.0	13.0	12.8
1979	18.8	291.2	272.5	467.8	178.0	121.9	56.1	289.9	2,495.2	11.5	12.3
1980	32.1	351.0	318.9	530.3	208.1	142.7	65.4	322.2	2,740.3	8.9	9.8
1981	33.9	382.8	348.9	588.1	242.2	167.5	74.8	345.9	3,028.6	11.7	10.5
1982	26.3	361.9	335.6	641.7	272.7	193.8	78.9	369.0	3,190.5	3.7	5.3
1983	−6.1	352.5	358.7	675.0	283.5	214.4	69.1	391.5	3,412.8	7.6	7.0
1984	−58.7	382.7	441.4	733.4	311.3	235.0	76.2	422.2	3,700.9	10.5	8.4
1985	−78.9	369.8	448.6	815.4	354.1	259.4	94.7	461.3	3,987.0	6.2	7.7
1986 p	−105.7	373.0	478.7	865.3	367.2	278.4	88.9	498.1	4,197.1	5.3	5.3
1982: IV	14.1	335.9	321.9	671.8	293.2	205.4	87.7	378.7	3,272.4	4.2	11.0
1983: IV	−25.8	364.7	390.5	676.1	276.1	221.5	54.6	400.0	3,514.8	12.4	7.8
1984: I	−45.6	373.4	419.0	693.2	283.4	227.1	56.3	409.8	3,575.4	14.9	7.1
II	−63.2	382.1	445.3	733.3	315.2	233.7	81.6	418.1	3,683.9	8.2	12.7
III	−60.0	389.2	449.1	743.8	317.2	234.5	82.7	426.6	3,735.3	6.1	5.7
IV	−66.1	386.2	452.2	763.4	329.1	244.9	84.2	434.3	3,808.9	4.9	8.1
1985: I	−49.4	378.4	427.9	777.3	333.7	248.9	84.8	443.5	3,883.9	6.8	8.1
II	−77.1	370.0	447.1	799.0	340.9	255.1	85.8	458.1	3,945.9	5.8	6.5
III	−83.7	362.3	446.0	829.7	360.9	265.5	95.5	468.8	4,027.4	6.8	8.5
IV	−105.3	368.2	473.6	855.6	380.9	268.0	112.9	474.7	4,090.8	5.8	6.4
1986: I	−93.7	374.8	468.5	836.7	355.7	266.4	89.3	480.9	4,105.4	6.2	1.4
II	−104.5	363.0	467.5	860.8	367.6	278.4	89.2	493.3	4,161.2	2.6	5.5
III	−108.9	370.8	479.7	874.0	369.3	286.8	82.6	504.7	4,245.2	6.4	8.3
IV p	−115.6	383.4	499.0	889.7	376.3	281.9	94.4	513.3	4,276.7	2.6	3.0

Source: Department of Commerce, Bureau of Economic Analysis.

TABLE B-2.—*Gross national product in 1982 dollars, 1929–86*

[Billions of 1982 dollars, except as noted; quarterly data at seasonally adjusted annual rates]

Year or quarter	Gross national product	Personal consumption expenditures				Gross private domestic investment						
		Total	Durable goods	Nondurable goods	Services	Total	Fixed investment					Change in business inventories
							Total	Nonresidential			Residential	
								Total	Structures	Producers' durable equipment		
1929	709.6	471.4	40.3	211.4	219.7	139.2	128.4	93.0	54.7	38.4	35.4	10.8
1933	498.5	378.7	20.7	181.8	176.2	22.7	33.5	25.8	14.3	11.5	7.7	−10.7
1939	716.6	480.5	35.7	248.0	196.7	86.0	82.1	53.2	25.2	28.0	28.9	3.9
1940	772.9	502.6	40.6	259.4	202.7	111.8	97.4	65.0	28.5	36.5	32.5	14.4
1941	909.4	531.1	46.2	275.6	209.3	138.8	111.1	76.6	33.4	43.2	34.4	27.8
1942	1,080.3	527.6	31.3	279.1	217.2	76.7	64.7	47.4	20.9	26.5	17.3	12.0
1943	1,276.2	539.9	28.1	284.7	227.2	50.4	49.7	39.4	15.6	23.8	10.4	.7
1944	1,380.6	557.1	26.3	297.9	232.9	56.4	61.6	52.6	20.4	32.1	9.0	−5.2
1945	1,354.8	592.7	28.7	323.5	240.5	76.5	84.9	74.2	27.0	47.2	10.7	−8.4
1946	1,096.9	655.0	47.8	344.2	262.9	178.1	150.2	105.5	50.9	54.7	44.7	27.9
1947	1,066.7	666.6	56.5	337.4	272.6	177.9	178.9	121.7	47.5	74.2	57.2	−1.0
1948	1,108.7	681.8	61.7	338.7	281.4	208.2	196.0	127.4	50.5	76.9	68.6	12.3
1949	1,109.0	695.4	67.8	342.3	285.3	168.8	178.4	114.8	49.3	65.5	63.6	−9.7
1950	1,203.7	733.2	80.7	352.8	299.8	234.9	210.8	124.0	52.8	71.2	86.7	24.2
1951	1,328.2	748.7	74.7	362.9	311.1	235.2	204.3	131.7	56.5	75.2	72.6	30.8
1952	1,380.0	771.4	73.0	376.6	321.9	211.8	201.8	130.6	57.3	73.3	71.2	10.0
1953	1,435.3	802.5	80.2	388.2	334.1	216.6	213.8	140.1	62.3	77.7	73.8	2.8
1954	1,416.2	822.7	81.5	393.8	347.4	212.6	217.3	137.5	64.9	72.7	79.8	−4.8
1955	1,494.9	873.8	96.9	413.2	363.6	259.8	243.5	151.0	69.4	81.7	92.4	16.3
1956	1,525.6	899.8	92.8	426.9	380.1	257.8	244.9	160.4	75.5	84.9	84.4	12.9
1957	1,551.1	919.7	92.4	434.7	392.6	243.4	240.4	161.1	75.2	85.9	79.3	3.0
1958	1,539.2	932.9	86.9	439.9	406.1	221.4	224.8	143.9	70.6	73.3	81.0	−3.4
1959	1,629.1	979.4	96.9	455.8	426.7	270.3	253.8	153.6	71.9	81.7	100.2	16.5
1960	1,665.3	1,005.1	98.0	463.3	443.9	260.5	252.7	159.4	76.1	83.3	93.3	7.7
1961	1,708.7	1,025.2	93.6	470.1	461.4	259.1	251.8	158.2	77.7	80.5	93.6	7.3
1962	1,799.4	1,069.0	103.0	484.2	481.8	288.6	272.4	170.2	81.3	88.9	102.2	16.2
1963	1,873.3	1,108.4	111.8	494.3	502.3	307.1	290.5	176.6	81.6	95.1	113.9	16.6
1964	1,973.3	1,170.6	120.8	517.5	532.3	325.9	310.2	194.9	87.9	107.0	115.3	15.7
1965	2,087.6	1,236.4	134.6	543.2	558.5	367.0	341.8	227.6	101.8	125.8	114.2	25.2
1966	2,208.3	1,298.9	144.4	569.3	585.3	390.5	353.7	250.4	108.0	142.4	103.2	36.9
1967	2,271.4	1,337.7	146.2	579.2	612.3	374.4	345.6	245.0	105.4	139.6	100.6	28.8
1968	2,365.6	1,405.9	161.6	602.4	641.8	391.8	370.7	254.5	108.0	146.5	116.2	21.0
1969	2,423.3	1,456.7	167.8	617.2	671.7	410.3	385.1	269.7	112.9	156.8	115.4	25.1
1970	2,416.2	1,492.0	162.5	632.5	697.0	381.5	373.3	264.0	111.1	152.9	109.3	8.2
1971	2,484.8	1,538.8	178.3	640.3	720.2	419.3	399.7	258.4	107.3	151.0	141.3	19.6
1972	2,608.5	1,621.9	200.4	665.5	756.0	465.4	443.7	277.0	109.5	167.5	166.6	21.8
1973	2,744.1	1,689.6	220.3	683.2	786.1	520.8	480.8	317.3	117.7	199.6	163.4	40.0
1974	2,729.3	1,674.0	204.9	666.1	803.1	481.3	448.0	317.8	115.2	202.7	130.2	33.3
1975	2,695.0	1,711.9	205.6	676.5	829.8	383.3	396.1	281.2	102.8	178.4	114.9	−12.8
1976	2,826.7	1,803.9	232.3	708.8	862.8	453.5	431.4	290.6	104.4	186.2	140.8	22.1
1977	2,958.6	1,883.8	253.9	731.4	898.5	521.3	492.2	324.0	108.3	215.7	168.1	29.1
1978	3,115.2	1,961.0	267.4	753.7	939.8	576.9	540.2	362.1	119.3	242.8	178.0	36.8
1979	3,192.4	2,004.4	266.5	766.6	971.2	575.2	560.2	389.4	130.6	258.8	170.8	15.0
1980	3,187.1	2,000.4	245.9	762.6	991.9	509.3	516.2	379.2	136.2	243.0	137.0	−6.9
1981	3,248.8	2,024.2	250.8	764.4	1,009.0	545.5	521.7	395.2	148.8	246.4	126.5	23.9
1982	3,166.0	2,050.7	252.7	771.0	1,027.0	447.3	471.8	366.7	143.3	223.4	105.1	−24.5
1983	3,279.1	2,146.0	283.1	800.2	1,062.7	504.0	510.4	361.2	127.2	233.9	149.3	−6.4
1984	3,489.9	2,246.3	318.9	828.6	1,098.7	652.0	592.8	422.2	141.3	280.9	170.6	59.2
1985	3,585.2	2,324.5	343.9	841.6	1,139.0	647.7	638.6	461.4	152.2	309.2	177.2	9.0
1986 ᵖ	3,676.5	2,418.6	368.9	872.4	1,177.3	659.7	648.9	455.0	134.7	320.3	193.9	10.8
1982: IV	3,159.3	2,078.7	262.0	778.6	1,038.1	408.8	468.1	352.3	138.3	214.1	115.8	−59.3
1983: IV	3,365.1	2,191.9	300.5	812.7	1,078.6	577.2	550.3	390.4	131.6	258.8	159.9	27.0
1984: I	3,444.7	2,213.8	311.1	819.7	1,083.0	649.3	564.1	394.4	133.5	260.9	169.7	85.1
II	3,487.1	2,246.3	319.0	832.8	1,094.6	649.7	592.7	419.5	141.3	278.2	173.2	57.0
III	3,507.4	2,253.3	318.8	831.7	1,102.8	658.9	598.3	427.1	142.9	284.2	171.2	60.6
IV	3,520.4	2,271.7	326.8	830.5	1,114.4	649.9	615.9	447.6	147.5	300.1	168.3	33.9
1985: I	3,547.0	2,292.3	332.3	834.3	1,125.8	638.2	615.0	442.7	149.9	292.8	172.4	23.2
II	3,567.6	2,311.9	338.8	841.3	1,131.8	655.6	638.1	463.0	154.1	308.9	175.1	17.4
III	3,603.8	2,342.0	357.4	843.8	1,140.8	643.8	643.1	463.1	152.3	310.9	180.0	.7
IV	3,622.3	2,351.7	347.0	847.2	1,157.5	653.2	658.4	476.9	152.4	324.5	181.5	−5.2
1986: I	3,655.9	2,372.7	345.4	860.6	1,166.6	684.0	644.1	457.8	148.1	309.7	186.3	39.9
II	3,661.4	2,408.4	357.1	877.3	1,174.0	664.7	649.6	456.8	132.9	323.9	192.7	15.1
III	3,686.4	2,448.0	391.6	875.4	1,181.0	651.3	651.6	454.4	129.5	324.9	197.2	−.3
IV ᵖ	3,702.4	2,445.1	381.3	876.2	1,187.6	638.8	650.3	451.0	128.4	322.6	199.3	−11.5

See next page for continuation of table.

TABLE B–2.—*Gross national product in 1982 dollars, 1929–86*—Continued

[Billions of 1982 dollars, except as noted; quarterly data at seasonally adjusted annual rates]

Year or quarter	Net exports of goods and services			Government purchases of goods and services					Final sales	Percent change from preceding period	
	Net exports	Exports	Imports	Total	Federal			State and local		Gross national product	Final sales
					Total	National defense	Nondefense				
1929	4.7	42.1	37.4	94.2	18.3	......	......	75.9	698.7	......	......
1933	−1.4	22.7	24.2	98.5	27.0	......	......	71.5	509.2	−2.1	−3.1
1939	6.1	36.2	30.1	144.1	53.8	......	......	90.3	712.7	7.9	6.3
1940	8.2	40.0	31.7	150.2	63.6	......	......	86.6	758.5	7.8	6.4
1941	3.9	42.0	38.2	235.6	153.0	......	......	82.6	881.6	17.7	16.2
1942	−7.7	29.1	36.9	483.7	407.1	......	......	76.7	1,068.3	18.8	21.2
1943	−23.0	25.1	48.0	708.9	638.1	......	......	70.8	1,275.5	18.1	19.4
1944	−23.8	27.3	51.1	790.8	722.5	......	......	68.3	1,385.7	8.2	8.6
1945	−18.9	35.2	54.1	704.5	634.0	......	......	70.5	1,363.3	−1.9	−1.6
1946	27.0	69.0	42.0	236.9	159.3	......	......	77.6	1,069.0	−19.0	−21.6
1947	42.4	82.3	39.9	179.8	91.9	......	......	87.9	1,067.7	−2.8	−.1
1948	19.2	66.2	47.1	199.5	106.1	......	......	93.4	1,096.4	3.9	2.7
1949	18.8	65.0	46.2	226.0	119.5	......	......	106.5	1,118.7	.0	2.0
1950	4.7	59.2	54.6	230.8	116.7	......	......	114.2	1,179.5	8.5	5.4
1951	14.6	72.0	57.4	329.7	214.4	......	......	115.4	1,297.4	10.3	10.0
1952	6.9	70.1	63.3	389.9	272.7	......	......	117.3	1,370.0	3.9	5.6
1953	−2.7	66.9	69.7	419.0	295.9	......	......	123.1	1,432.5	4.0	4.6
1954	2.5	70.0	67.5	378.4	245.0	......	......	133.4	1,421.0	−1.3	−.8
1955	.0	76.9	76.9	361.3	217.9	......	......	143.4	1,478.6	5.6	4.1
1956	4.3	87.9	83.6	363.7	215.4	......	......	148.3	1,512.7	2.1	2.3
1957	7.0	94.9	87.9	381.1	224.1	......	......	157.0	1,548.1	1.7	2.3
1958	−10.3	82.4	92.8	395.3	224.9	......	......	170.4	1,542.6	−.8	−.4
1959	−18.2	83.7	101.9	397.7	221.5	......	......	176.2	1,612.6	5.8	4.5
1960	−4.0	98.4	102.4	403.7	220.6	......	......	183.1	1,657.5	2.2	2.8
1961	−2.7	100.7	103.3	427.1	232.9	......	......	194.2	1,701.4	2.6	2.6
1962	−7.5	106.9	114.4	449.4	249.3	......	......	200.1	1,783.3	5.3	4.8
1963	−1.9	114.7	116.6	459.8	247.8	......	......	212.0	1,856.7	4.1	4.1
1964	5.9	128.8	122.8	470.8	244.2	......	......	226.6	1,957.6	5.3	5.4
1965	−2.7	132.0	134.7	487.0	244.4	......	......	242.5	2,062.4	5.8	5.4
1966	−13.7	138.4	152.1	532.6	273.8	......	......	258.8	2,171.5	5.8	5.3
1967	−16.9	143.6	160.5	576.2	304.4	......	......	271.8	2,242.6	2.9	3.3
1968	−29.7	155.7	185.3	597.6	309.6	......	......	288.0	2,344.6	4.1	4.5
1969	−34.9	165.0	199.9	591.2	295.6	......	......	295.6	2,398.1	2.4	2.3
1970	−30.0	178.3	208.3	572.6	268.3	......	......	304.3	2,407.9	−.3	.4
1971	−39.8	179.2	218.9	566.5	250.6	......	......	315.9	2,465.2	2.8	2.4
1972	−49.4	195.2	244.6	570.7	246.0	185.3	60.7	324.7	2,586.8	5.0	4.9
1973	−31.5	242.3	273.8	565.3	230.0	171.0	59.1	335.3	2,704.1	5.2	4.5
1974	.8	269.1	268.4	573.2	226.4	163.3	63.1	346.8	2,696.0	−.5	−.3
1975	18.9	259.7	240.8	580.9	226.3	161.1	65.2	354.6	2,707.8	−1.3	.4
1976	−11.0	274.4	285.4	580.3	224.2	157.5	66.8	356.0	2,804.6	4.9	3.6
1977	−35.5	281.6	317.1	589.1	231.8	159.2	72.7	357.2	2,929.5	4.7	4.5
1978	−26.8	312.6	339.4	604.1	233.7	160.7	73.0	370.4	3,078.4	5.3	5.1
1979	3.6	356.8	353.2	609.1	236.2	164.3	71.9	373.0	3,177.4	2.5	3.2
1980	57.0	388.9	332.0	620.5	246.9	171.2	75.7	373.6	3,194.0	−.2	.5
1981	49.4	392.7	343.4	629.7	259.6	180.3	79.3	370.1	3,225.0	1.9	1.0
1982	26.3	361.9	335.6	641.7	272.7	193.8	78.9	369.0	3,190.5	−2.5	−1.1
1983	−19.9	348.1	368.1	649.0	275.1	206.9	68.2	373.9	3,285.5	3.6	3.0
1984	−83.6	369.7	453.2	675.2	291.7	219.4	72.3	383.5	3,430.7	6.4	4.4
1985	−108.2	362.3	470.5	721.2	323.6	235.7	87.8	397.6	3,576.2	2.7	4.2
1986 ^{p}	−149.7	371.3	521.0	748.0	333.4	251.0	82.4	414.5	3,665.7	2.5	2.5
1982: IV	11.7	336.0	324.3	660.1	289.5	201.4	88.2	370.6	3,218.6	.6	7.1
1983: IV	−46.2	355.5	401.6	642.2	266.0	211.6	54.4	376.2	3,338.1	7.3	3.8
1984: I	−68.6	361.3	429.9	650.2	271.2	214.4	56.8	379.0	3,359.6	9.8	2.6
II	−87.2	367.0	454.2	678.2	296.3	219.0	77.3	381.8	3,430.0	5.0	8.6
III	−85.7	375.5	461.2	681.0	295.6	218.4	77.1	385.4	3,446.8	2.3	2.0
IV	−92.7	375.0	467.7	691.5	303.8	225.9	77.9	387.7	3,486.4	1.5	4.7
1985: I	−78.8	369.4	448.2	695.3	305.8	228.0	77.8	389.5	3,523.9	3.1	4.4
II	−108.1	361.2	469.3	708.3	311.4	233.5	77.9	396.9	3,550.2	2.3	3.0
III	−113.8	355.8	469.6	731.8	329.9	242.2	87.6	401.9	3,603.1	4.1	6.1
IV	−132.0	362.9	494.8	749.4	347.2	239.3	107.9	402.2	3,627.5	2.1	2.7
1986: I	−125.9	369.2	495.1	725.2	320.4	238.7	81.7	404.8	3,616.1	3.8	−1.3
II	−153.9	359.8	513.6	742.2	328.9	249.3	79.5	413.3	3,646.3	.6	3.4
III	−163.3	371.2	534.5	750.4	330.9	259.4	71.5	419.5	3,686.7	2.8	4.5
IV ^{p}	−155.6	385.3	540.8	774.1	353.5	256.5	97.0	420.6	3,713.9	1.7	3.0

Source: Department of Commerce, Bureau of Economic Analysis.

TABLE B-3.—*Implicit price deflators for gross national product, 1929–86*

[Index numbers, 1982 = 100, except as noted; quarterly data seasonally adjusted]

Year or quarter	Gross national product	Personal consumption expenditures				Gross private domestic investment [1]				
		Total	Durable goods	Nondurable goods	Services	Fixed investment				
						Total	Nonresidential			Residential
							Total	Structures	Producers' durable equipment	
1929	14.6	16.4	22.9	17.8	13.8	11.6	11.8	10.0	14.3	11.2
1933	11.2	12.1	16.8	12.2	11.4	9.4	9.8	7.6	12.5	8.1
1939	12.7	13.9	18.7	14.2	12.8	11.1	11.5	8.8	13.9	10.5
1940	13.0	14.1	19.2	14.3	12.9	11.5	11.9	9.0	14.2	10.9
1941	13.8	15.2	20.9	15.5	13.5	12.4	12.7	9.7	14.9	11.9
1942	14.7	16.8	22.0	18.2	14.3	13.2	13.3	10.7	15.3	12.8
1943	15.1	18.4	23.3	20.6	15.1	13.8	13.8	11.4	15.4	13.8
1944	15.3	19.4	25.4	21.6	16.0	14.2	14.0	11.6	15.6	14.9
1945	15.7	20.2	27.7	22.2	16.5	14.5	14.3	12.3	15.4	15.8
1946	19.4	22.0	33.0	24.0	17.3	16.7	16.4	14.5	18.2	17.5
1947	22.1	24.3	36.1	26.9	18.6	19.8	19.3	17.1	20.7	21.1
1948	23.6	25.7	37.1	28.5	19.7	21.7	21.0	18.9	22.5	22.8
1949	23.5	25.6	36.9	27.7	20.5	22.2	21.7	18.6	24.0	23.0
1950	23.9	26.2	38.1	27.8	21.1	22.9	22.4	18.8	25.0	23.7
1951	25.1	27.8	40.0	30.1	22.2	24.6	24.2	21.1	26.4	25.4
1952	25.5	28.4	40.1	30.5	23.3	25.0	24.4	21.3	26.9	26.1
1953	25.9	29.0	40.8	30.4	24.6	25.5	25.1	21.8	27.7	26.3
1954	26.3	29.1	39.4	30.4	25.3	25.6	25.2	21.4	28.6	26.4
1955	27.2	29.5	40.1	30.2	25.9	26.3	25.8	21.8	29.3	27.0
1956	28.1	30.1	41.2	30.6	26.7	27.8	27.7	24.1	31.0	27.9
1957	29.1	31.0	42.9	31.5	27.6	29.0	29.5	25.2	33.3	28.0
1958	29.7	31.6	42.8	32.2	28.5	28.9	29.5	24.8	34.0	28.0
1959	30.4	32.3	44.2	32.6	29.3	29.3	30.2	25.0	34.7	28.0
1960	30.9	32.9	44.4	33.1	30.2	29.7	30.6	25.2	35.6	28.2
1961	31.2	33.3	44.8	33.5	30.7	29.7	30.5	25.0	35.9	28.2
1962	31.9	33.9	45.7	33.8	31.4	29.9	30.9	25.2	36.1	28.3
1963	32.4	34.4	46.3	34.3	32.0	30.1	31.3	25.5	36.2	28.2
1964	32.9	35.0	47.0	34.7	32.5	30.4	31.5	25.9	36.2	28.5
1965	33.8	35.6	47.1	35.3	33.2	31.1	32.1	26.9	36.4	29.0
1966	35.0	36.7	47.5	36.6	34.2	32.4	33.3	28.2	37.2	29.9
1967	35.9	37.6	48.3	37.5	35.3	33.4	34.4	29.1	38.4	30.9
1968	37.7	39.3	50.1	39.0	36.8	34.8	35.9	30.4	39.9	32.5
1969	39.8	41.0	51.4	40.9	38.6	37.2	37.9	32.9	41.5	35.6
1970	42.0	42.9	52.7	42.7	40.7	39.0	39.9	35.2	43.2	37.0
1971	44.4	44.9	54.7	44.2	43.1	41.2	42.4	38.1	45.5	39.0
1972	46.5	46.7	55.5	45.8	45.1	43.2	44.4	40.6	46.8	41.2
1973	49.5	49.6	56.6	49.7	47.4	45.6	46.0	43.7	47.3	44.8
1974	54.0	54.8	60.4	57.2	51.3	50.3	50.5	49.5	51.1	49.8
1975	59.3	59.2	65.9	61.5	55.6	56.9	57.9	54.7	59.7	54.2
1976	63.1	62.6	69.5	63.8	59.8	60.7	61.9	57.6	64.4	58.0
1977	67.3	66.7	72.7	67.1	64.8	65.6	66.1	61.6	68.3	64.6
1978	72.2	71.6	76.9	71.9	69.8	71.9	71.5	67.9	73.3	72.6
1979	78.6	78.2	82.1	80.0	75.6	78.9	77.8	76.2	78.6	81.4
1980	85.7	86.6	89.2	89.4	83.9	86.3	85.1	83.6	86.0	89.4
1981	94.0	94.6	95.7	96.9	92.6	94.2	93.4	93.1	93.7	96.6
1982	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
1983	103.9	104.1	102.1	102.1	106.2	99.8	98.8	97.5	99.5	102.2
1984	107.9	108.1	103.8	105.0	111.7	100.9	98.7	98.6	98.7	106.3
1985	111.5	111.9	104.5	107.5	117.3	101.8	99.3	101.7	98.1	108.2
1986 [p]	114.5	114.2	105.3	106.9	122.4	104.0	100.8	106.6	98.3	111.7
1982: IV	101.7	101.8	100.7	101.0	102.7	100.3	100.7	99.5	101.5	99.1
1983: IV	105.4	105.7	103.1	103.1	108.3	99.7	98.3	96.8	99.1	103.1
1984: I	106.6	106.8	103.3	104.4	109.6	100.0	98.4	97.1	99.1	103.6
II	107.4	107.6	103.9	104.5	110.9	100.8	98.5	98.5	98.5	106.4
III	108.3	108.5	104.1	105.1	112.4	101.3	98.8	99.0	98.6	107.5
IV	109.2	109.5	104.1	106.0	113.6	101.4	99.0	99.5	98.7	107.8
1985: I	110.2	110.4	104.6	106.5	115.0	101.7	99.4	100.6	98.8	107.6
II	111.1	111.4	104.5	107.2	116.6	101.5	99.2	101.3	98.1	107.8
III	111.8	112.2	104.5	107.5	118.0	101.7	99.3	101.8	98.0	108.1
IV	112.8	113.4	104.3	108.9	119.5	102.2	99.4	103.2	97.6	109.4
1986: I	113.5	113.7	104.5	108.0	120.6	103.2	100.3	104.4	98.4	110.2
II	114.0	113.4	104.7	105.8	121.8	103.6	100.2	106.5	97.6	111.7
III	115.0	114.4	105.9	106.6	123.0	104.4	101.0	107.8	98.3	112.2
IV [p]	115.3	115.3	106.0	107.3	124.3	105.0	101.6	108.0	99.0	112.7

See next page for continuation of table.

TABLE B-3.—*Implicit price deflators for gross national product, 1929–86*—Continued

[Index numbers, 1982=100, except as noted; quarterly data seasonally adjusted]

Year or quarter	Exports and imports of goods and services [1]		Government purchases of goods and services					Final sales	Percent change from preceding period, GNP implicit price deflator [2]
			Total	Federal			State and local		
	Exports	Imports		Total	National defense	Non-defense			
1929	16.8	15.9	9.4	8.1			9.7	14.6	
1933	10.7	8.6	8.4	8.0			8.6	11.3	−2.2
1939	12.7	11.3	9.4	9.7			9.2	12.8	−.8
1940	13.6	11.6	9.5	9.7			9.3	13.0	2.0
1941	14.6	12.3	10.6	11.1			9.7	13.7	6.2
1942	17.2	13.1	12.4	12.8			10.2	14.7	6.6
1943	18.5	13.6	12.5	12.8			10.6	15.2	2.6
1944	20.2	14.1	12.3	12.4			11.2	15.3	1.4
1945	21.1	14.6	11.8	11.8			11.6	15.7	2.9
1946	22.0	17.4	12.3	12.0			12.8	19.3	22.9
1947	24.6	20.9	14.7	14.8			14.5	22.1	13.9
1948	26.5	22.4	16.3	16.3			16.3	23.4	7.0
1949	25.2	21.2	17.3	17.6			16.9	23.5	−.5
1950	24.4	22.5	16.8	16.3			17.3	23.9	2.0
1951	27.4	26.7	18.3	18.0			18.9	24.9	4.8
1952	27.4	25.3	19.4	19.3			19.7	25.4	1.5
1953	27.0	24.1	19.8	19.6			20.2	25.9	1.6
1954	26.9	24.1	20.1	19.7			20.7	26.3	1.6
1955	27.5	23.5	20.8	20.6			21.2	27.1	3.2
1956	28.6	23.8	21.9	21.5			22.4	28.0	3.4
1957	29.7	23.8	22.9	22.5			23.5	29.0	3.6
1958	29.6	22.7	24.1	24.2			24.0	29.7	2.1
1959	29.9	23.1	24.6	24.6			24.6	30.4	2.4
1960	30.4	23.4	24.9	24.7			25.2	30.9	1.6
1961	30.9	23.1	25.4	25.0			25.9	31.2	1.0
1962	31.0	22.9	26.3	25.9			26.7	31.9	2.2
1963	31.1	23.6	26.9	26.5			27.4	32.4	1.6
1964	31.4	24.1	27.6	27.2			28.0	32.9	1.5
1965	32.5	24.7	28.5	28.1			28.8	33.7	2.7
1966	33.7	25.7	29.8	29.4			30.2	34.9	3.6
1967	34.5	26.2	31.2	30.5			32.0	35.9	2.6
1968	35.2	26.6	33.1	32.3			33.9	37.7	5.0
1969	36.6	27.4	35.1	33.8			36.3	39.8	5.6
1970	38.7	29.0	38.1	36.8			39.2	42.0	5.5
1971	40.4	30.2	41.0	39.8			41.9	44.4	5.7
1972	41.7	32.0	43.8	43.0	41.8	46.8	44.4	46.5	4.7
1973	47.1	35.5	47.1	46.2	45.3	48.9	47.8	49.5	6.5
1974	56.3	50.4	52.2	51.3	50.6	53.3	52.8	54.1	9.1
1975	62.1	54.1	57.7	57.1	55.6	60.6	58.1	59.2	9.8
1976	64.8	55.7	61.5	60.8	59.3	64.3	62.0	63.0	6.4
1977	68.0	59.8	65.8	65.2	63.4	69.1	66.1	67.2	6.7
1978	72.8	65.8	70.4	69.2	67.8	72.4	71.1	72.1	7.3
1979	81.6	77.1	76.8	75.4	74.2	78.0	77.7	78.5	8.9
1980	90.2	96.0	85.5	84.3	83.4	86.4	86.2	85.8	9.0
1981	97.5	101.6	93.4	93.3	92.9	94.3	93.4	93.9	9.7
1982	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	6.4
1983	101.3	97.4	104.0	103.1	103.6	101.4	104.7	103.9	3.9
1984	103.5	97.4	108.6	106.7	107.1	105.5	110.1	107.9	3.8
1985	102.1	95.4	113.1	109.4	110.0	107.9	116.0	111.5	3.3
1986 ᵖ	100.4	91.9	115.7	110.1	110.9	107.8	120.1	114.5	2.7
1982: IV	100.0	99.3	101.8	101.3	102.0	99.5	102.2	101.7	3.6
1983: IV	102.6	97.2	105.3	103.8	104.7	100.3	106.3	105.3	4.7
1984: I	103.4	97.5	106.6	104.5	105.9	99.2	108.1	106.4	4.6
II	104.1	98.0	108.1	106.4	106.7	105.5	109.5	107.4	3.0
III	103.6	97.4	109.2	107.3	107.3	107.3	110.7	108.4	3.4
IV	103.0	96.7	110.4	108.3	108.4	108.2	112.0	109.3	3.4
1985: I	102.4	95.5	111.8	109.1	109.2	109.0	113.9	110.2	3.7
II	102.4	95.3	112.8	109.5	109.3	110.2	115.4	111.1	3.3
III	101.8	95.0	113.4	109.4	109.6	108.9	116.6	111.8	2.5
IV	101.5	95.7	114.2	109.7	112.0	104.6	118.0	112.8	3.6
1986: I	101.5	94.6	115.4	111.0	111.6	109.2	118.8	113.5	2.5
II	100.9	91.0	116.0	111.8	111.7	112.1	119.4	114.1	1.8
III	99.9	89.7	116.5	111.6	110.5	115.4	120.3	115.1	3.6
IV ᵖ	99.5	92.3	114.9	106.5	109.9	97.3	122.1	115.2	1.0

[1] Separate deflators are not calculated for gross private domestic investment, change in business inventories, and net exports of goods and services.

[2] Quarterly changes are at annual rates.

Source: Department of Commerce, Bureau of Economic Analysis.

Table B-4.—*Fixed-weighted price indexes for gross national product, 1982 weights, 1959–86*

[Index numbers, 1982=100, except as noted; quarterly data seasonally adjusted]

Year or quarter	Gross national product	Personal consumption expenditures	Gross private domestic investment[1]			Exports and imports of goods and services[1]		Government purchases of goods and services					Percent change from preceding period, GNP fixed-weighted price index[2]
			Fixed investment			Exports	Imports	Total	Federal			State and local	
			Total	Nonresidential	Residential				Total	National defense	Nondefense		
1959	37.6	35.2	58.0	65.9	30.2	32.8	27.0	25.8	26.9	...	...	24.9	...
1960	38.1	35.7	58.1	66.1	30.3	33.5	27.3	26.4	27.3	...	...	25.7	1.4
1961	38.4	36.1	58.0	66.0	30.2	34.0	27.0	27.0	27.8	...	...	26.4	.7
1962	38.7	36.4	58.0	66.1	29.9	34.1	26.7	27.8	28.4	...	...	27.3	.8
1963	39.1	36.8	58.0	66.2	29.5	34.4	27.1	28.5	29.3	...	...	27.9	1.0
1964	39.6	37.2	58.2	66.4	29.6	34.8	27.7	29.3	30.1	...	...	28.5	1.2
1965	40.1	37.7	58.5	66.7	30.0	35.9	28.1	30.0	30.8	...	...	29.3	1.4
1966	41.1	38.5	59.3	67.4	30.8	37.1	29.1	31.3	32.0	...	...	30.6	2.5
1967	42.1	39.5	60.2	68.4	31.6	38.2	29.5	32.7	32.8	...	...	32.5	2.6
1968	43.7	41.0	61.4	69.5	33.1	39.3	30.1	34.5	34.5	...	...	34.4	3.7
1969	45.6	42.8	63.2	71.0	36.0	40.9	31.2	36.6	36.4	...	...	36.7	4.4
1970	47.2	44.7	61.5	68.4	37.4	43.3	33.4	39.6	39.5	...	...	39.6	3.6
1971	48.8	46.6	60.6	66.6	39.5	45.3	35.6	42.3	42.4	...	...	42.2	3.5
1972	50.3	48.3	59.8	65.0	41.6	46.5	37.8	45.2	46.0	44.3	50.5	44.6	2.9
1973	53.1	51.0	61.8	66.6	45.1	50.8	42.4	48.8	50.1	47.4	56.9	47.8	5.5
1974	57.2	55.8	64.4	68.5	50.1	59.8	54.5	53.5	54.8	51.4	63.3	52.6	7.8
1975	61.8	60.1	69.0	73.1	54.6	65.4	59.7	58.6	59.4	56.5	66.6	57.9	8.0
1976	65.1	63.5	71.4	75.2	58.4	67.4	61.3	62.2	62.4	59.7	69.0	62.0	5.3
1977	68.4	67.5	72.6	74.9	64.8	70.3	66.1	66.0	65.8	63.5	71.5	66.2	5.1
1978	72.7	72.2	74.5	75.0	72.5	74.5	71.3	70.9	70.6	68.6	75.5	71.2	6.2
1979	78.8	78.6	80.3	80.1	81.2	82.9	80.9	77.3	76.8	75.1	81.0	77.7	8.5
1980	86.1	86.8	86.9	86.1	89.4	90.5	96.3	86.3	86.4	84.7	90.6	86.2	9.3
1981	94.1	94.6	94.5	93.9	96.6	97.7	101.5	94.1	94.9	93.8	97.4	93.5	9.3
1982	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	6.2
1983	104.1	104.2	100.4	99.9	102.2	101.6	97.7	104.5	104.1	103.7	105.1	104.8	4.1
1984	108.3	108.4	101.8	100.5	106.3	104.5	97.7	109.2	107.9	107.5	108.8	110.3	4.0
1985	112.3	112.4	103.3	101.9	108.2	104.0	95.9	114.1	111.0	111.4	110.0	116.0	3.7
1986[p]	115.4	115.2	105.2	103.3	111.5	103.9	92.1	117.1	111.8	112.8	109.5	121.0	2.8
1982: IV	101.7	101.8	100.2	100.5	99.1	100.0	99.3	102.0	101.7	101.8	101.4	102.2	4.0
1983: IV	105.7	105.8	100.5	99.6	103.3	103.2	97.6	106.0	105.4	104.7	107.0	106.4	4.0
1984: I	106.9	107.1	100.6	99.7	103.7	104.0	97.8	107.7	106.9	106.3	108.4	108.2	4.7
II	107.8	107.9	101.6	100.2	106.4	105.0	98.4	108.8	107.7	107.2	109.1	109.7	3.6
III	108.8	108.9	102.2	100.7	107.4	104.7	97.7	109.6	107.9	107.4	109.0	110.9	3.5
IV	109.8	109.9	102.7	101.2	107.7	104.3	97.2	110.8	108.9	108.9	108.8	112.2	3.6
1985: I	110.9	110.8	102.7	101.3	107.6	104.1	95.7	112.6	110.5	110.8	109.9	114.1	4.2
II	111.9	112.0	103.0	101.6	107.8	104.3	95.9	113.5	110.5	110.7	110.0	115.7	3.6
III	112.6	112.8	103.4	102.0	108.1	103.8	95.4	114.4	110.8	111.2	109.7	117.0	2.8
IV	113.7	114.1	104.0	102.4	109.4	103.8	96.5	115.8	112.1	112.9	110.3	118.5	4.0
1986: I	114.4	114.6	104.2	102.5	110.1	104.3	94.8	116.4	112.3	113.2	110.1	119.4	2.5
II	114.9	114.5	104.9	103.1	111.4	104.0	90.9	116.7	112.0	112.7	110.1	120.2	1.7
III	115.6	115.4	105.5	103.6	112.0	103.5	90.9	117.1	111.4	112.5	108.8	121.3	2.6
IV[p]	116.4	116.4	105.9	104.0	112.5	103.6	92.9	118.2	111.5	112.6	108.9	123.1	2.6

[1] Separate deflators are not calculated for gross private domestic investment, change in business inventories, and net exports of goods and services.

[2] Quarterly changes are at annual rates.

Source: Department of Commerce, Bureau of Economic Analysis.

TABLE B–5.—*Changes in gross national product, personal consumption expenditures, and related price measures, 1933–86*

[Percent change from preceding period; quarterly data at seasonally adjusted annual rates]

Year or quarter	Gross national product					Personal consumption expenditures				
	Current dollars	Constant (1982) dollars	Implicit price deflator	Chain price index	Fixed-weighted price index (1982 weights)	Current dollars	Constant (1982) dollars	Implicit price deflator	Chain price index	Fixed-weighted price index (1982 weights)
1933	−4.2	−2.1	−2.2	......	......	−5.7	−1.6	−4.2	......	......
1939	7.0	7.9	−.8	......	......	4.6	5.1	−.5	......	......
1940	10.0	7.8	2.0	......	......	6.0	4.6	1.3	......	......
1941	25.0	17.7	6.2	......	......	13.8	5.7	7.7	......	......
1942	26.6	18.8	6.6	......	......	9.7	−.7	10.4	......	......
1943	21.2	18.1	2.6	......	......	12.2	2.3	9.6	......	......
1944	9.7	8.2	1.4	......	......	8.8	3.2	5.4	......	......
1945	.9	−1.9	2.9	......	......	10.5	6.4	3.9	......	......
1946	−.5	−19.0	22.9	......	......	20.4	10.5	8.9	......	......
1947	10.8	−2.8	13.9	......	......	12.5	1.8	10.6	......	......
1948	11.2	3.9	7.0	......	......	8.0	2.3	5.6	......	......
1949	−.5	.0	−.5	......	......	1.9	2.0	−.1	......	......
1950	10.7	8.5	2.0	......	......	7.7	5.4	2.2	......	......
1951	15.7	10.3	4.8	......	......	8.3	2.1	6.1	......	......
1952	5.5	3.9	1.5	......	......	5.3	3.0	2.2	......	......
1953	5.7	4.0	1.6	......	......	6.2	4.0	2.1	......	......
1954	.2	−1.3	1.6	......	......	3.1	2.5	.6	......	......
1955	9.0	5.6	3.2	......	......	7.5	6.2	1.3	......	......
1956	5.5	2.1	3.4	......	......	4.9	3.0	1.9	......	......
1957	5.3	1.7	3.6	......	......	5.4	2.2	3.2	......	......
1958	1.3	−.8	2.1	......	......	3.3	1.4	1.8	......	......
1959	8.5	5.8	2.4	......	......	7.4	5.0	2.2	......	......
1960	3.9	2.2	1.6	1.5	1.4	4.6	2.6	1.9	1.7	1.5
1961	3.6	2.6	1.0	1.0	.7	3.1	2.0	1.2	1.1	.9
1962	7.6	5.3	2.2	1.2	.8	6.1	4.3	1.8	1.1	.9
1963	5.6	4.1	1.6	1.3	1.0	5.5	3.7	1.5	1.4	1.1
1964	7.1	5.3	1.5	1.5	1.2	7.2	5.6	1.7	1.2	1.2
1965	8.5	5.8	2.7	1.8	1.4	7.7	5.6	1.7	1.5	1.2
1966	9.5	5.8	3.6	3.0	2.5	8.3	5.1	3.1	2.7	2.2
1967	5.8	2.9	2.6	2.8	2.6	5.5	3.0	2.5	2.5	2.5
1968	9.3	4.1	5.0	4.3	3.7	9.7	5.1	4.5	4.0	3.8
1969	8.0	2.4	5.6	5.0	4.4	8.2	3.6	4.3	4.4	4.3
1970	5.4	−.3	5.5	5.2	3.6	7.0	2.4	4.6	4.7	4.6
1971	8.6	2.8	5.7	4.8	3.5	8.1	3.1	4.7	4.3	4.2
1972	10.0	5.0	4.7	4.2	2.9	9.5	5.4	4.0	3.6	3.5
1973	12.1	5.2	6.5	5.9	5.5	10.5	4.2	6.2	6.0	5.7
1974	8.3	−.5	9.1	8.9	7.8	9.5	−.9	10.5	10.3	9.4
1975	8.5	−1.3	9.8	9.2	8.0	10.5	2.3	8.0	8.0	7.7
1976	11.5	4.9	6.4	5.9	5.3	11.5	5.4	5.7	5.7	5.6
1977	11.7	4.7	6.7	6.1	5.1	11.3	4.4	6.5	6.4	6.3
1978	13.0	5.3	7.3	7.2	6.2	11.6	4.1	7.3	7.2	7.0
1979	11.5	2.5	8.9	8.7	8.5	11.6	2.2	9.2	9.2	8.8
1980	8.9	−.2	9.0	9.0	9.3	10.6	−.2	10.7	10.9	10.5
1981	11.7	1.9	9.7	9.4	9.3	10.5	1.2	9.2	9.2	9.0
1982	3.7	−2.5	6.4	6.3	6.2	7.1	1.3	5.7	5.7	5.6
1983	7.6	3.6	3.9	4.1	4.1	9.0	4.6	4.1	4.2	4.2
1984	10.5	6.4	3.8	4.0	4.0	8.7	4.7	3.8	4.0	4.0
1985	6.2	2.7	3.3	3.6	3.7	7.1	3.5	3.5	3.6	3.7
1986 ^{p}	5.3	2.5	2.7	2.5	2.8	6.2	4.0	2.1	2.4	2.5
1982: IV	4.2	.6	3.6	4.1	4.0	10.3	5.3	4.4	4.8	4.8
1983: IV	12.4	7.3	4.7	3.9	4.0	9.7	5.5	4.3	4.1	4.1
1984: I	14.9	9.8	4.6	4.8	4.7	8.6	4.1	4.2	4.5	4.7
II	8.2	5.0	3.0	3.6	3.6	9.1	6.0	3.0	3.0	3.0
III	6.1	2.3	3.4	3.6	3.5	5.0	1.3	3.4	3.7	3.8
IV	4.9	1.5	3.4	3.5	3.6	7.0	3.3	3.7	3.7	3.8
1985: I	6.8	3.1	3.7	3.9	4.2	7.2	3.7	3.3	3.5	3.6
II	5.8	2.3	3.3	3.5	3.6	7.3	3.5	3.7	4.0	4.2
III	6.8	4.1	2.5	2.5	2.8	8.2	5.3	2.9	2.8	3.0
IV	5.8	2.1	3.6	3.9	4.0	6.4	1.7	4.3	4.7	4.7
1986: I	6.2	3.8	2.5	1.9	2.5	4.6	3.6	1.1	1.4	1.5
II	2.6	.6	1.8	1.5	1.7	5.2	6.2	−1.1	−.3	−.4
III	6.4	2.8	3.6	2.5	2.6	10.3	6.7	3.6	3.6	3.4
IV ^{p}	2.6	1.7	1.0	2.3	2.6	2.9	−.5	3.2	3.6	3.5

Source: Department of Commerce, Bureau of Economic Analysis.

TABLE B-6.—*Gross national product by major type of product, 1929–86*

[Billions of dollars; quarterly data at seasonally adjusted annual rates]

Year or quarter	Gross national product	Final sales	Inventory change	Goods							Services	Structures	Auto output
				Total			Durable goods		Nondurable goods				
				Total	Final sales	Inventory change	Final sales	Inventory change	Final sales	Inventory change			
1929	103.9	102.2	1.7	56.1	54.4	1.7	16.1	1.4	38.3	0.3	35.9	11.9	....
1933	56.0	57.6	−1.6	27.0	28.6	−1.6	5.4	−.5	23.2	−1.1	25.9	3.1	....
1939	91.3	90.9	.4	49.0	48.6	.4	12.4	.3	36.2	.1	34.5	7.8	....
1940	100.4	98.3	2.2	56.0	53.8	2.2	15.4	1.2	38.4	1.0	35.8	8.6	....
1941	125.5	121.0	4.5	72.5	68.0	4.5	23.8	3.1	44.2	1.4	40.9	12.1	....
1942	159.0	157.2	1.8	93.7	91.9	1.8	34.5	1.0	57.4	.7	50.9	14.4	....
1943	192.7	193.4	−.6	120.4	121.0	−.6	54.2	.0	66.8	−.6	63.2	9.2	....
1944	211.4	212.3	−1.0	132.3	133.3	−1.0	58.5	−.6	74.8	−.3	72.4	6.6	....
1945	213.4	214.4	−1.0	128.9	129.9	−1.0	50.1	−1.3	79.8	.2	77.3	7.2	....
1946	212.4	206.0	6.4	125.3	118.9	6.4	31.8	5.3	87.1	1.1	70.5	16.6	....
1947	235.2	235.7	−.5	139.8	140.3	−.5	44.4	1.4	95.9	−1.9	72.7	22.8	7.2
1948	261.6	256.9	4.7	154.4	149.7	4.7	48.0	1.0	101.7	3.7	78.0	29.2	8.8
1949	260.4	263.4	−3.1	147.7	150.8	−3.1	50.0	−1.8	100.9	−1.3	83.0	29.6	11.9
1950	288.3	281.4	6.8	162.4	155.6	6.8	56.2	3.6	99.4	3.2	89.0	36.9	15.4
1951	333.4	323.2	10.2	189.9	179.6	10.2	66.4	6.1	113.2	4.2	104.4	39.1	13.3
1952	351.6	348.6	3.1	195.5	192.4	3.1	72.6	1.2	119.8	1.9	115.2	40.9	12.0
1953	371.6	371.1	.4	204.6	204.2	.4	78.0	1.5	126.2	−1.1	123.4	43.6	16.1
1954	372.5	374.1	−1.6	198.0	199.6	−1.6	74.1	−2.5	125.5	.9	128.5	46.0	14.7
1955	405.9	400.2	5.7	216.3	210.6	5.7	81.7	3.4	128.9	2.3	138.5	51.1	21.2
1956	428.2	423.6	4.6	225.4	220.7	4.6	86.2	2.1	134.5	2.5	148.9	53.9	16.9
1957	451.0	449.6	1.4	234.7	233.3	1.4	91.7	.5	141.6	.9	161.6	54.8	19.4
1958	456.8	458.3	−1.5	230.5	232.0	−1.5	84.8	−2.8	147.2	1.3	170.9	55.5	14.5
1959	495.8	490.0	5.8	250.8	245.1	5.8	91.1	3.1	154.0	2.6	183.5	61.5	19.4
1960	515.3	512.3	3.1	257.2	254.1	3.1	93.8	1.6	160.3	1.4	197.4	60.7	21.3
1961	533.8	531.4	2.4	260.4	258.0	2.4	93.1	−.1	164.8	2.5	210.9	62.5	17.8
1962	574.6	568.5	6.1	281.5	275.4	6.1	103.4	3.4	172.0	2.7	226.4	66.7	22.4
1963	606.9	601.1	5.8	293.2	287.4	5.8	110.0	2.7	177.4	3.1	242.2	71.5	25.1
1964	649.8	644.4	5.4	313.5	308.1	5.4	119.6	4.0	188.5	1.4	261.1	75.2	25.9
1965	705.1	695.2	9.9	342.9	333.0	9.9	132.4	6.7	200.6	3.2	280.5	81.7	31.1
1966	772.0	757.8	14.2	380.1	365.9	14.2	147.9	10.2	218.1	4.0	307.2	84.6	30.2
1967	816.4	806.1	10.3	395.1	384.9	10.3	154.5	5.5	230.4	4.8	334.9	86.4	27.8
1968	892.7	884.8	7.9	427.4	419.5	7.9	169.1	4.7	250.4	3.2	368.0	97.2	35.0
1969	963.9	954.1	9.8	456.6	446.8	9.8	180.1	6.4	266.7	3.4	402.3	105.1	34.7
1970	1,015.5	1,012.3	3.1	467.8	464.7	3.1	182.1	−.1	282.6	3.2	441.1	106.5	28.5
1971	1,102.7	1,094.9	7.8	493.0	485.2	7.8	189.4	2.8	295.8	4.9	484.9	124.8	38.9
1972	1,212.8	1,202.3	10.5	537.4	526.9	10.5	209.7	7.2	317.2	3.3	533.2	142.1	41.4
1973	1,359.3	1,339.7	19.6	616.4	596.8	19.6	241.9	15.0	354.9	4.6	586.6	156.3	46.0
1974	1,472.8	1,457.4	15.4	663.1	647.7	15.4	257.2	11.2	390.4	4.3	650.6	159.1	38.8
1975	1,598.4	1,604.1	−5.6	714.7	720.3	−5.6	288.2	−7.0	432.2	1.3	725.2	158.5	40.3
1976	1,782.8	1,766.8	16.0	798.9	782.9	16.0	323.6	10.3	459.3	5.7	803.5	180.4	55.2
1977	1,990.5	1,969.2	21.3	882.0	860.7	21.3	369.4	9.7	491.3	11.6	895.9	212.6	64.3
1978	2,249.7	2,221.0	28.6	991.4	962.8	28.6	416.9	20.1	545.9	8.6	1,003.0	255.3	68.3
1979	2,508.2	2,495.2	13.0	1,099.1	1,086.1	13.0	473.1	10.3	613.0	2.7	1,121.9	287.1	66.9
1980	2,732.0	2,740.3	−8.3	1,174.9	1,183.2	−8.3	499.4	−2.9	683.8	−5.4	1,265.0	292.0	60.1
1981	3,052.6	3,028.6	24.0	1,322.9	1,298.9	24.0	541.1	6.8	757.8	17.2	1,415.4	314.4	69.4
1982	3,166.0	3,190.5	−24.5	1,319.1	1,343.7	−24.5	542.9	−16.8	800.8	−7.7	1,547.5	299.4	66.5
1983	3,405.7	3,412.8	−7.1	1,396.1	1,403.2	−7.1	574.3	−1.0	828.8	−6.1	1,682.5	327.1	88.6
1984	3,765.0	3,700.9	64.1	1,576.7	1,512.6	64.1	635.9	39.2	876.7	25.0	1,813.2	375.1	103.5
1985	3,998.1	3,987.0	11.1	1,630.2	1,619.1	11.1	693.6	6.6	925.5	4.5	1,959.8	408.1	114.1
1986 [p]	4,208.5	4,197.1	11.4	1,673.0	1,661.6	11.4	715.5	4.2	946.1	7.2	2,105.5	430.0	114.8
1982: IV	3,212.5	3,272.4	−59.9	1,309.8	1,369.7	−59.9	551.8	−42.7	817.9	−17.2	1,598.9	303.9	64.5
1983: IV	3,545.8	3,514.8	31.0	1,473.7	1,442.7	31.0	610.4	16.7	832.3	14.3	1,730.1	342.0	102.1
1984: I	3,670.9	3,575.4	95.5	1,553.5	1,458.1	95.5	612.4	45.6	845.7	49.9	1,760.3	357.1	108.3
II	3,743.8	3,683.9	59.9	1,573.5	1,513.7	59.9	632.2	36.8	881.5	23.1	1,792.9	377.3	97.1
III	3,799.7	3,735.3	64.4	1,585.8	1,521.4	64.4	633.0	44.8	888.4	19.6	1,832.3	381.6	99.7
IV	3,845.6	3,808.9	36.7	1,594.1	1,557.4	36.7	666.0	29.5	891.4	7.2	1,867.1	384.4	108.9
1985: I	3,909.3	3,883.9	25.4	1,611.6	1,586.2	25.4	671.1	17.3	915.2	8.1	1,906.3	391.4	114.8
II	3,965.0	3,945.9	19.1	1,622.4	1,603.3	19.1	690.8	2.3	912.6	16.7	1,935.4	407.2	111.4
III	4,030.5	4,027.4	3.1	1,642.7	1,639.7	3.1	713.0	−2.7	926.7	5.8	1,971.9	415.9	116.9
IV	4,087.7	4,090.8	−3.1	1,644.1	1,647.2	−3.1	699.6	9.5	947.7	−12.7	2,025.5	418.1	113.3
1986: I	4,149.2	4,105.4	43.8	1,669.0	1,625.2	43.8	682.0	28.6	943.1	15.3	2,057.7	422.6	113.2
II	4,175.6	4,161.2	14.5	1,661.5	1,647.1	14.5	703.2	−.1	943.9	14.6	2,087.4	426.7	112.7
III	4,240.7	4,245.2	−4.5	1,680.2	1,684.7	−4.5	745.7	−15.6	939.0	11.1	2,125.2	435.3	112.0
IV [p]	4,268.4	4,276.7	−8.3	1,681.1	1,689.4	−8.3	731.1	3.9	958.3	−12.2	2,151.7	435.7	121.2

Source: Department of Commerce, Bureau of Economic Analysis.

TABLE B-7.—*Gross national product by major type of product in 1982 dollars, 1929–86*

[Billions of 1982 dollars; quarterly data at seasonally adjusted annual rates]

Year or quarter	Gross national product	Final sales	Inventory change	Goods							Services	Structures	Auto output
				Total			Durable goods		Nondurable goods				
				Total	Final sales	Inventory change	Final sales	Inventory change	Final sales	Inventory change			
1929	709.6	698.7	10.8	308.1	297.3	10.8	85.8	7.5	211.5	3.3	290.0	111.4	....
1933	498.5	509.2	−10.7	210.0	220.7	−10.7	34.9	−4.5	185.7	−6.2	252.1	36.5	....
1939	716.6	712.7	3.9	331.7	327.8	3.9	74.8	1.6	253.1	2.3	306.4	78.5	....
1940	772.9	758.5	14.4	370.3	355.9	14.4	91.9	7.2	264.0	7.2	318.1	84.5	....
1941	909.4	881.6	27.8	431.9	404.2	27.8	122.9	17.4	281.2	10.3	367.1	110.3	....
1942	1,080.3	1,068.3	12.0	504.1	492.1	12.0	163.3	7.5	328.8	4.5	460.4	115.8	....
1943	1,276.2	1,275.5	.7	608.6	607.9	.7	254.4	1.4	353.5	−.7	598.9	68.7	....
1944	1,380.6	1,385.7	−5.2	664.6	669.8	−5.2	292.4	−3.8	377.4	−1.4	665.0	50.9	....
1945	1,354.8	1,363.3	−8.4	639.1	647.5	−8.4	263.1	−7.8	384.4	−.6	662.3	53.5	....
1946	1,096.9	1,069.0	27.9	521.0	493.1	27.9	129.6	23.1	363.5	4.8	472.0	104.0	....
1947	1,066.7	1,067.7	−1.0	517.1	518.1	−1.0	164.7	2.8	353.4	−3.8	431.0	118.6	24.1
1948	1,108.7	1,096.4	12.3	531.7	519.4	12.3	166.5	3.4	353.0	8.8	438.1	138.9	27.6
1949	1,109.0	1,118.7	−9.7	517.9	527.6	−9.7	166.8	−6.1	360.8	−3.6	450.1	141.0	35.5
1950	1,203.7	1,179.5	24.2	561.4	537.2	24.2	180.0	11.4	357.1	12.8	470.4	171.9	44.9
1951	1,328.2	1,297.4	30.8	623.0	592.2	30.8	208.8	19.1	383.4	11.7	537.7	167.5	38.3
1952	1,380.0	1,370.0	10.0	641.3	631.3	10.0	229.8	3.6	401.5	6.4	567.3	171.4	34.9
1953	1,435.3	1,432.5	2.8	676.6	673.8	2.8	245.4	4.7	428.4	−2.0	577.6	181.2	44.8
1954	1,416.2	1,421.0	−4.8	643.5	648.2	−4.8	230.6	−7.7	417.7	2.9	579.5	193.2	43.3
1955	1,494.9	1,478.6	16.3	683.9	667.6	16.3	245.2	9.5	422.3	6.8	601.0	210.0	58.2
1956	1,525.6	1,512.7	12.9	697.1	684.1	12.9	248.3	6.3	435.8	6.7	619.7	208.9	45.8
1957	1,551.1	1,548.1	3.0	699.3	696.3	3.0	251.3	1.9	445.0	1.1	645.4	206.5	48.3
1958	1,539.2	1,542.6	−3.4	674.2	677.6	−3.4	229.1	−7.1	448.6	3.7	654.7	210.3	37.4
1959	1,629.1	1,612.6	16.5	716.6	700.1	16.5	236.8	8.2	463.4	8.3	681.5	231.0	45.7
1960	1,665.3	1,657.5	7.7	726.8	719.1	7.7	242.2	4.0	476.9	3.7	709.9	228.5	49.6
1961	1,708.7	1,701.4	7.3	730.2	723.0	7.3	239.2	−.1	483.7	7.3	743.0	235.4	41.1
1962	1,799.4	1,783.3	16.2	773.5	757.3	16.2	260.2	8.4	497.1	7.7	777.0	248.9	49.8
1963	1,873.3	1,856.7	16.6	797.5	780.8	16.6	273.4	7.1	507.4	9.5	811.5	264.4	54.6
1964	1,973.3	1,957.6	15.7	845.2	829.5	15.7	295.4	11.2	534.1	4.5	852.8	275.3	55.3
1965	2,087.6	2,062.4	25.2	904.0	878.8	25.2	322.2	17.4	556.5	7.8	891.6	292.0	66.9
1966	2,208.3	2,171.5	36.9	974.7	937.8	36.9	354.2	26.3	583.6	10.6	942.7	291.0	64.8
1967	2,271.4	2,242.6	28.8	993.1	964.3	28.8	363.6	14.4	600.7	14.4	990.6	287.6	58.3
1968	2,365.6	2,344.6	21.0	1,024.8	1,003.7	21.0	378.5	11.8	625.3	9.3	1,032.0	308.8	70.5
1969	2,423.3	2,398.1	25.1	1,048.5	1,023.3	25.1	389.7	15.2	633.6	9.9	1,066.9	307.9	67.6
1970	2,416.2	2,407.9	8.2	1,030.0	1,021.7	8.2	381.7	−.5	640.1	8.8	1,092.4	293.8	53.1
1971	2,484.8	2,465.2	19.6	1,037.6	1,017.9	19.6	375.5	7.1	642.4	12.5	1,126.1	321.2	69.8
1972	2,608.5	2,586.8	21.8	1,093.8	1,072.1	21.8	409.4	15.4	662.7	6.4	1,169.4	345.4	73.9
1973	2,744.1	2,704.1	40.0	1,175.0	1,135.0	40.0	474.9	30.8	660.1	9.2	1,218.7	350.4	82.0
1974	2,729.3	2,696.0	33.3	1,159.2	1,125.9	33.3	476.0	20.0	649.9	13.3	1,256.4	313.7	65.4
1975	2,695.0	2,707.8	−12.8	1,125.0	1,137.8	−12.8	471.1	−11.4	666.7	−1.4	1,286.4	283.6	61.8
1976	2,826.7	2,804.6	22.1	1,194.7	1,172.5	22.1	490.9	15.9	681.7	6.3	1,324.4	307.6	80.1
1977	2,958.6	2,929.5	29.1	1,256.2	1,227.1	29.1	534.0	14.2	693.1	14.9	1,368.7	333.7	88.7
1978	3,115.2	3,078.4	36.8	1,329.1	1,292.4	36.8	572.5	27.5	719.9	9.3	1,426.9	359.1	87.3
1979	3,192.4	3,177.4	15.0	1,354.6	1,339.6	15.0	604.6	13.3	735.1	1.7	1,478.6	359.2	80.2
1980	3,187.1	3,194.0	−6.9	1,344.2	1,351.1	−6.9	584.0	−3.2	767.1	−3.7	1,511.1	331.8	67.1
1981	3,248.8	3,225.0	23.9	1,386.0	1,362.2	23.9	578.5	6.9	783.7	16.9	1,533.4	329.4	73.3
1982	3,166.0	3,190.5	−24.5	1,319.1	1,343.7	−24.5	542.9	−16.8	800.8	−7.7	1,547.5	299.4	66.5
1983	3,279.1	3,285.5	−6.4	1,367.0	1,373.4	−6.4	565.4	−1.2	808.0	−5.2	1,585.5	326.6	85.9
1984	3,489.9	3,430.7	59.2	1,503.1	1,443.9	59.2	615.9	37.5	828.0	21.7	1,623.0	363.9	97.3
1985	3,585.2	3,576.2	9.0	1,533.2	1,524.2	9.0	670.0	5.9	854.2	3.2	1,667.6	384.4	104.6
1986 ᵖ	3,676.5	3,665.7	10.8	1,569.0	1,558.2	10.8	699.6	3.7	858.6	7.1	1,718.1	389.4	102.5
1982: IV	3,159.3	3,218.6	−59.3	1,297.9	1,357.1	−59.3	543.8	−42.4	813.4	−16.9	1,555.5	305.9	63.3
1983: IV	3,365.1	3,338.1	27.0	1,423.8	1,396.8	27.0	596.6	16.1	800.2	10.9	1,600.7	340.6	96.4
1984: I	3,444.7	3,359.6	85.1	1,486.3	1,401.2	85.1	596.2	43.6	805.0	41.5	1,604.9	353.5	102.3
II	3,487.1	3,430.0	57.0	1,506.1	1,449.1	57.0	614.1	35.5	835.0	21.6	1,614.9	366.1	92.2
III	3,507.4	3,446.8	60.6	1,510.3	1,449.7	60.6	611.8	42.8	837.9	17.8	1,629.7	367.4	93.5
IV	3,520.4	3,486.4	33.9	1,509.5	1,475.6	33.9	641.5	28.0	834.1	5.9	1,642.5	368.4	101.4
1985: I	3,547.0	3,523.9	23.2	1,521.1	1,497.9	23.2	643.8	16.2	854.1	7.0	1,653.0	373.0	105.7
II	3,567.6	3,550.2	17.4	1,526.0	1,508.6	17.4	666.6	1.7	841.9	15.7	1,656.5	385.1	102.3
III	3,603.8	3,603.1	.7	1,544.2	1,543.6	.7	689.3	−2.9	854.2	3.5	1,668.7	390.9	107.6
IV	3,622.3	3,627.5	−5.2	1,541.7	1,546.9	−5.2	680.2	8.4	866.7	−13.6	1,692.1	388.5	102.7
1986: I	3,655.9	3,616.1	39.9	1,563.6	1,523.7	39.9	662.6	26.0	861.1	13.9	1,703.0	389.4	103.2
II	3,661.4	3,646.3	15.1	1,562.8	1,547.6	15.1	688.3	−.7	859.4	15.9	1,712.0	386.6	101.6
III	3,686.4	3,686.7	−.3	1,568.0	1,568.3	−.3	728.6	−14.4	839.7	14.1	1,727.2	391.3	98.3
IV ᵖ	3,702.4	3,713.9	−11.5	1,581.6	1,593.2	−11.5	718.7	3.9	874.4	−15.4	1,730.5	390.3	106.8

Source: Department of Commerce, Bureau of Economic Analysis.

TABLE B-8.—*Gross national product by sector, 1929–86*

[Billions of dollars; quarterly data at seasonally adjusted annual rates]

Year or quarter	Gross national product	Gross domestic product									Rest of the world
		Total	Business [1]				Households and institutions	Government [2]			
			Total [1]	Nonfarm [1]	Farm	Statistical discrepancy		Total	Federal	State and local	
1929	103.9	103.2	96.0	84.8	9.7	1.5	2.9	4.4	0.9	3.5	0.8
1933	56.0	55.7	49.3	43.6	4.6	1.2	1.7	4.7	1.2	3.5	.3
1939	91.3	90.9	81.0	73.0	6.3	1.7	2.3	7.6	3.5	4.2	.4
1940	100.4	100.1	89.8	82.0	6.4	1.4	2.4	7.8	3.5	4.3	.4
1941	125.5	125.0	113.0	103.4	8.9	.7	2.5	9.5	5.1	4.4	.5
1942	159.0	158.5	140.4	128.0	13.0	−.7	2.9	15.2	10.7	4.5	.5
1943	192.7	192.3	163.4	149.8	15.3	−1.7	3.2	25.6	21.0	4.7	.4
1944	211.4	210.9	174.9	156.9	15.3	2.7	3.7	32.3	27.3	4.9	.5
1945	213.4	213.0	173.5	153.5	16.0	4.0	4.1	35.3	30.0	5.4	.4
1946	212.4	211.6	184.8	165.2	18.8	.7	4.5	22.4	16.2	6.2	.7
1947	235.2	234.1	211.3	189.3	20.2	1.8	5.1	17.6	10.3	7.3	1.2
1948	261.6	260.1	236.4	214.4	23.3	−1.3	5.6	18.1	9.6	8.5	1.5
1949	260.4	259.0	232.9	213.3	18.8	.8	5.9	20.1	10.7	9.4	1.4
1950	288.3	286.7	259.0	238.3	20.0	.8	6.5	21.2	11.1	10.1	1.5
1951	333.4	331.4	296.7	271.1	22.9	2.7	6.9	27.7	16.6	11.2	2.0
1952	351.6	349.4	310.7	286.7	22.2	1.8	7.2	31.5	19.3	12.3	2.2
1953	371.6	369.5	329.3	306.3	20.3	2.6	7.8	32.4	19.1	13.3	2.1
1954	372.5	370.3	329.1	306.7	19.7	2.7	8.1	33.0	18.3	14.7	2.2
1955	405.9	403.3	359.4	338.8	18.8	1.8	9.1	34.8	19.0	15.8	2.6
1956	428.2	425.2	378.1	361.4	18.6	−1.9	9.9	37.2	19.6	17.6	3.0
1957	451.0	447.7	397.3	380.1	18.4	−1.2	10.6	39.8	20.2	19.6	3.4
1958	456.8	453.9	399.5	378.9	20.7	−.1	11.5	42.9	21.3	21.6	2.9
1959	495.8	492.7	435.5	417.9	19.0	−1.5	12.4	44.8	21.7	23.1	3.1
1960	515.3	511.8	449.9	432.5	20.2	−2.8	13.9	48.1	22.6	25.5	3.5
1961	533.8	530.0	463.9	445.0	20.2	−1.2	14.5	51.6	23.6	27.9	3.8
1962	574.6	570.1	499.1	478.6	20.4	.0	15.6	55.4	25.2	30.2	4.5
1963	606.9	602.0	526.0	506.2	20.5	−.6	16.7	59.3	26.5	32.9	4.9
1964	649.8	644.4	562.1	544.3	19.3	−1.4	17.9	64.4	28.5	35.9	5.4
1965	705.1	699.3	610.7	590.0	21.9	−1.2	19.3	69.3	30.0	39.3	5.8
1966	772.0	766.3	666.7	641.7	22.8	2.1	21.3	78.4	34.3	44.1	5.6
1967	816.4	810.4	699.7	677.8	22.2	−.4	23.4	87.4	37.8	49.5	6.0
1968	892.7	885.9	762.0	740.4	22.7	−1.1	26.1	97.8	41.9	55.9	6.8
1969	963.9	957.1	820.1	798.8	25.2	−3.9	29.5	107.5	44.9	62.6	6.8
1970	1,015.5	1,008.2	856.3	831.2	26.3	−1.1	32.4	119.5	48.4	71.1	7.3
1971	1,102.7	1,093.4	927.4	897.5	28.1	1.8	35.6	130.3	51.1	79.3	9.3
1972	1,212.8	1,201.6	1,020.0	988.8	32.8	−1.6	39.0	142.6	54.9	87.7	11.2
1973	1,359.3	1,343.1	1,145.0	1,098.3	51.0	−4.3	43.0	155.0	57.1	97.9	16.2
1974	1,472.8	1,453.3	1,237.5	1,190.0	49.2	−1.7	47.2	168.7	61.1	107.6	19.5
1975	1,598.4	1,580.9	1,341.2	1,288.4	50.3	2.5	52.0	187.7	66.5	121.1	17.5
1976	1,782.8	1,761.7	1,500.7	1,448.7	48.5	3.6	57.1	203.8	70.9	132.9	21.1
1977	1,990.5	1,965.1	1,682.1	1,631.7	50.4	.0	62.4	220.5	75.5	145.0	25.4
1978	2,249.7	2,219.1	1,908.4	1,850.0	60.3	−1.9	70.2	240.5	81.7	158.9	30.5
1979	2,508.2	2,464.4	2,125.3	2,054.5	71.8	−1.0	78.6	260.4	86.9	173.5	43.8
1980	2,732.0	2,684.4	2,306.8	2,236.4	65.5	4.9	89.3	288.3	96.1	192.2	47.6
1981	3,052.6	3,000.5	2,582.8	2,498.9	79.8	4.1	101.0	316.7	107.4	209.3	52.1
1982	3,166.0	3,114.8	2,658.2	2,581.3	77.0	−.1	112.7	343.9	117.0	226.9	51.2
1983	3,405.7	3,355.9	2,866.6	2,802.1	59.3	5.2	122.9	366.4	124.7	241.7	49.9
1984	3,765.0	3,717.5	3,194.3	3,117.2	79.0	−1.9	132.3	390.9	132.0	258.9	47.5
1985	3,998.1	3,957.0	3,394.0	3,324.0	75.5	−5.5	142.1	420.9	140.7	280.1	41.2
1986 p	4,208.5	4,171.2	3,572.3	3,498.7	68.1	5.4	153.1	445.9	145.1	300.8	37.3
1982: IV	3,212.5	3,163.8	2,693.6	2,607.7	79.0	6.8	116.9	353.4	120.7	232.6	48.7
1983: IV	3,545.8	3,494.6	2,994.8	2,932.7	59.6	2.5	126.6	373.1	126.0	247.2	51.3
1984: I	3,670.9	3,622.1	3,110.6	3,022.7	82.9	5.0	128.9	382.6	130.5	252.1	48.9
II	3,743.8	3,697.7	3,178.6	3,102.4	79.4	−3.2	131.3	387.9	131.4	256.4	46.0
III	3,799.7	3,751.3	3,224.7	3,148.2	77.0	−.6	133.3	393.4	132.4	261.0	48.4
IV	3,845.6	3,798.8	3,263.2	3,195.3	76.6	−8.6	135.9	399.7	133.7	266.0	46.8
1985: I	3,909.3	3,866.8	3,317.2	3,247.4	76.1	−6.4	138.2	411.5	139.1	272.4	42.5
II	3,965.0	3,923.8	3,365.7	3,301.3	76.1	−11.7	140.5	417.6	140.0	277.6	41.2
III	4,030.5	3,991.4	3,424.7	3,357.8	72.4	−5.5	143.4	423.3	140.5	282.8	39.1
IV	4,087.7	4,045.8	3,468.4	3,389.4	77.5	1.6	146.2	431.2	143.4	287.8	41.9
1986: I	4,149.2	4,106.0	3,519.9	3,451.7	71.8	−3.6	149.5	436.7	144.0	292.6	43.2
II	4,175.6	4,140.7	3,546.3	3,470.1	71.6	4.6	152.0	442.5	144.7	297.8	34.9
III	4,240.7	4,203.2	3,600.7	3,524.0	66.4	10.3	154.4	448.1	145.2	302.9	37.4
IV p	4,268.4	4,234.9	3,622.2	3,549.3	62.6	10.3	156.6	456.2	146.4	309.8	33.5

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[1] Includes compensation of employees in government enterprises.
[2] Compensation of government employees.

Source: Department of Commerce, Bureau of Economic Analysis.

TABLE B–9.—*Gross national product by sector in 1982 dollars, 1929–86*

[Billions of 1982 dollars; quarterly data at seasonally adjusted annual rates]

Year or quarter	Gross national product	Gross domestic product									Rest of the world
		Total	Business [1]				Households and institutions	Government [2]			
			Total [1]	Nonfarm [1]	Farm	Statistical discrepancy		Total	Federal	State and local	
1929	709.6	704.6	611.6	547.8	54.1	9.7	34.4	58.6	13.2	45.3	4.9
1933	498.5	496.1	404.9	338.7	56.6	9.6	27.1	64.0	16.2	47.9	2.4
1939	716.6	713.5	586.8	518.3	56.4	12.1	33.3	93.4	38.9	54.6	3.1
1940	772.9	770.3	635.5	571.2	54.6	9.7	35.8	99.0	44.1	55.0	2.6
1941	909.4	906.0	738.7	675.8	58.1	4.8	35.8	131.5	76.2	55.3	3.4
1942	1,080.3	1,077.1	832.9	774.4	62.4	−4.0	36.9	207.4	152.9	54.4	3.1
1943	1,276.2	1,273.4	891.6	841.6	59.2	−9.2	34.3	347.6	294.6	52.9	2.7
1944	1,380.6	1,377.7	934.3	862.5	57.2	14.6	34.3	409.1	357.5	51.7	2.9
1945	1,354.8	1,352.6	914.3	839.3	53.7	21.3	34.4	403.8	350.7	53.2	2.3
1946	1,096.9	1,093.3	866.3	809.0	54.0	3.3	35.4	191.6	135.0	56.6	3.6
1947	1,066.7	1,061.6	886.1	828.6	49.9	7.6	37.9	137.7	76.7	61.0	5.1
1948	1,108.7	1,102.5	925.4	875.1	55.2	−4.9	41.2	135.8	73.2	62.6	6.2
1949	1,109.0	1,103.4	916.7	858.5	55.0	3.2	42.4	144.2	77.1	67.1	5.6
1950	1,203.7	1,197.4	1,002.8	941.4	58.3	3.1	45.0	149.6	80.3	69.3	6.2
1951	1,328.2	1,320.3	1,080.5	1,014.9	56.0	9.7	46.1	193.7	122.8	71.0	7.9
1952	1,380.0	1,371.7	1,114.7	1,050.9	57.2	6.5	46.2	210.7	137.5	73.3	8.3
1953	1,435.3	1,427.4	1,170.0	1,101.3	59.3	9.4	47.7	209.7	133.2	76.5	7.9
1954	1,416.2	1,407.8	1,154.6	1,084.2	60.9	9.5	48.4	204.8	125.0	79.8	8.4
1955	1,494.9	1,485.5	1,229.7	1,161.5	62.0	6.2	53.2	202.6	119.2	83.4	9.4
1956	1,525.6	1,515.0	1,254.1	1,199.6	60.7	−6.2	56.1	204.8	116.1	88.7	10.7
1957	1,551.1	1,539.7	1,274.0	1,219.0	58.8	−3.8	57.7	208.0	114.5	93.5	11.5
1958	1,539.2	1,529.7	1,260.4	1,199.7	61.2	−.5	60.7	208.6	109.5	99.2	9.5
1959	1,629.1	1,619.1	1,345.8	1,291.6	58.8	−4.6	62.7	210.6	107.5	103.1	10.0
1960	1,665.3	1,654.1	1,369.7	1,317.2	61.1	−8.7	67.4	217.1	108.9	108.2	11.1
1961	1,708.7	1,696.6	1,403.2	1,346.7	60.2	−3.7	68.0	225.4	111.5	113.9	12.1
1962	1,799.4	1,785.6	1,480.9	1,421.1	59.8	.1	70.7	233.9	116.7	117.3	13.9
1963	1,873.3	1,858.5	1,546.7	1,483.7	59.8	−1.8	72.5	239.2	116.1	123.1	14.9
1964	1,973.3	1,957.1	1,635.2	1,581.6	57.7	−4.1	74.6	247.3	116.8	130.5	16.1
1965	2,087.6	2,070.6	1,737.4	1,681.8	59.0	−3.4	77.4	255.8	117.3	138.5	17.0
1966	2,208.3	2,192.5	1,837.1	1,776.5	54.7	5.9	80.4	275.0	128.1	146.9	15.9
1967	2,271.4	2,255.0	1,880.9	1,824.2	57.7	−1.0	83.1	291.0	138.5	152.4	16.3
1968	2,365.6	2,347.9	1,961.1	1,908.3	55.7	−2.8	85.6	301.2	140.7	160.5	17.7
1969	2,423.3	2,406.2	2,009.8	1,962.1	57.2	−9.5	88.2	308.2	141.0	167.2	17.0
1970	2,416.2	2,399.1	2,004.4	1,946.4	60.7	−2.7	87.0	307.7	133.2	174.5	17.1
1971	2,484.8	2,464.1	2,068.0	2,001.4	62.3	4.2	88.8	307.4	125.5	181.9	20.7
1972	2,608.5	2,584.9	2,186.6	2,128.0	62.0	−3.4	91.2	307.1	118.3	188.8	23.7
1973	2,744.1	2,711.8	2,309.1	2,256.6	61.1	−8.6	93.4	309.3	113.6	195.7	32.2
1974	2,729.3	2,693.5	2,283.9	2,226.5	60.7	−3.3	93.9	315.7	113.5	202.1	35.9
1975	2,695.0	2,665.7	2,249.6	2,180.6	64.8	4.2	96.4	319.6	112.8	206.8	29.3
1976	2,826.7	2,793.7	2,374.8	2,306.6	62.5	5.6	97.0	321.9	112.7	209.2	33.0
1977	2,958.6	2,921.2	2,497.2	2,434.9	62.2	.1	98.0	326.0	112.7	213.3	37.4
1978	3,115.2	3,073.0	2,639.2	2,581.0	61.0	−2.8	101.0	332.8	113.9	219.0	42.1
1979	3,192.4	3,136.6	2,696.4	2,633.2	64.6	−1.4	103.7	336.5	113.0	223.5	55.7
1980	3,187.1	3,131.7	2,683.2	2,613.1	64.2	5.9	107.3	341.2	114.4	226.8	55.5
1981	3,248.8	3,193.6	2,739.8	2,659.6	75.7	4.4	109.9	343.9	115.8	228.1	55.2
1982	3,166.0	3,114.8	2,658.2	2,581.3	77.0	−.1	112.7	343.9	117.0	226.9	51.2
1983	3,279.1	3,231.2	2,770.1	2,703.7	61.3	5.0	114.9	346.3	119.0	227.3	47.9
1984	3,489.9	3,446.0	2,978.3	2,910.4	69.6	−1.7	117.7	350.0	120.7	229.3	43.9
1985	3,585.2	3,548.3	3,071.5	2,998.9	77.6	−5.0	121.2	355.5	122.6	232.9	37.0
1986 ^{p}	3,676.5	3,643.8	3,158.9	3,080.7	73.4	4.8	125.5	359.4	123.2	236.2	32.7
1982: IV	3,159.3	3,111.3	2,654.1	2,567.1	80.3	6.7	113.8	343.5	117.6	225.9	48.0
1983: IV	3,365.1	3,316.6	2,853.2	2,795.3	55.6	2.3	115.8	347.5	119.4	228.1	48.5
1984: I	3,444.7	3,399.1	2,934.4	2,860.9	68.7	4.7	116.2	348.4	120.0	228.4	45.6
II	3,487.1	3,444.4	2,977.9	2,912.7	68.2	−3.0	117.3	349.2	120.5	228.7	42.7
III	3,507.4	3,462.9	2,994.5	2,925.6	69.4	−.5	118.0	350.4	120.8	229.6	44.5
IV	3,520.4	3,477.6	3,006.3	2,942.2	72.1	−8.0	119.3	352.0	121.3	230.6	42.8
1985: I	3,547.0	3,508.5	3,034.8	2,965.6	75.0	−5.8	119.7	354.0	122.5	231.6	38.5
II	3,567.6	3,530.5	3,054.8	2,988.0	77.5	−10.7	120.6	355.1	122.6	232.5	37.1
III	3,603.8	3,568.8	3,090.8	3,016.9	78.9	−4.9	121.8	356.2	122.8	233.4	35.1
IV	3,622.3	3,585.2	3,105.4	3,025.0	79.0	1.4	122.9	356.9	122.6	234.3	37.1
1986: I	3,655.9	3,617.9	3,135.8	3,061.6	77.4	−3.2	124.1	357.9	122.9	235.0	38.1
II	3,661.4	3,630.6	3,146.9	3,067.5	75.3	4.0	125.1	358.7	123.0	235.7	30.8
III	3,686.4	3,653.8	3,168.0	3,087.3	71.5	9.1	126.0	359.8	123.2	236.6	32.7
IV ^{p}	3,702.4	3,673.1	3,184.8	3,106.3	69.4	9.1	127.0	361.3	123.8	237.5	29.3

[1] Includes compensation of employees in government enterprises.

[2] Compensation of government employees.

Source: Department of Commerce, Bureau of Economic Analysis.

TABLE B-10.—*Gross national product by industry, 1947–85*

[Billions of dollars]

Year	Gross national product	Gross domestic product												Rest of the world
		Agriculture, forestry, and fisheries	Mining	Construction	Manufacturing			Transportation and public utilities	Wholesale and retail trade	Finance, insurance, and real estate	Services	Government and government enterprises	Statistical discrepancy	
					Total	Durable goods	Nondurable goods							
1947	235.2	20.8	6.8	9.1	66.2	33.5	32.7	21.0	44.2	23.8	20.2	20.2	1.8	1.2
1948	261.6	24.0	9.4	11.5	74.7	38.2	36.6	23.7	48.4	26.9	21.9	20.8	−1.3	1.5
1949	260.4	19.5	8.1	11.5	72.2	37.1	35.0	23.9	48.0	29.2	22.6	23.2	.8	1.4
1950	288.3	20.8	9.3	13.2	84.0	45.9	38.1	26.6	51.5	32.2	24.2	24.2	.8	1.5
1951	333.4	23.9	10.2	15.6	99.0	55.5	43.4	30.2	56.8	35.5	26.4	31.2	2.7	2.0
1952	351.6	23.2	10.2	16.9	103.3	59.0	44.3	32.2	59.0	39.1	28.1	35.7	1.8	2.2
1953	371.6	21.4	10.7	17.5	112.5	66.1	46.4	34.2	60.4	43.3	30.2	36.8	2.6	2.1
1954	372.5	20.8	11.0	17.7	106.7	61.0	45.7	33.8	61.6	47.0	31.6	37.4	2.7	2.2
1955	405.9	20.0	12.5	19.1	121.3	70.8	50.4	36.8	67.0	50.7	35.1	39.0	1.8	2.6
1956	428.2	19.8	13.6	21.3	127.2	73.9	53.3	39.6	71.3	54.3	38.7	41.2	−1.9	3.0
1957	451.0	19.6	13.7	22.2	131.8	78.0	53.9	41.7	75.0	58.5	41.7	44.5	−1.2	3.4
1958	456.8	22.1	12.6	21.8	124.3	70.0	54.3	41.9	76.4	63.1	44.0	47.8	−.1	2.9
1959	495.8	20.4	12.5	23.7	141.8	81.6	60.3	45.1	83.3	68.2	48.3	50.8	−1.5	3.1
1960	515.3	21.7	12.8	24.3	144.4	82.5	61.9	47.3	85.7	72.8	51.4	54.2	−2.8	3.5
1961	533.8	21.8	12.9	25.3	145.0	81.6	63.3	48.9	88.0	76.9	54.9	57.6	−1.2	3.8
1962	574.6	22.3	13.1	27.1	158.6	91.9	66.8	51.9	94.1	81.7	59.2	62.1	.0	4.5
1963	606.9	22.3	13.4	28.9	168.1	98.0	70.1	54.8	98.2	86.5	63.3	67.0	−.6	4.9
1964	649.8	21.4	13.8	31.6	180.2	105.7	74.5	58.3	107.1	92.0	69.0	72.5	−1.4	5.4
1965	705.1	24.2	14.0	34.7	198.4	118.4	80.0	62.6	115.0	98.9	74.6	78.2	−1.2	5.8
1966	772.0	25.3	14.6	37.9	217.4	130.8	86.6	67.4	124.1	106.9	82.5	88.1	2.1	5.6
1967	816.4	24.9	15.2	39.7	222.9	133.7	89.2	70.7	132.9	115.6	90.6	98.4	−.4	6.0
1968	892.7	25.7	16.2	43.5	243.6	146.1	97.5	76.4	146.8	125.1	99.1	110.5	−1.1	6.8
1969	963.9	28.6	17.1	48.7	257.1	154.2	102.9	82.6	159.2	136.3	110.5	121.0	−3.9	6.8
1970	1,015.5	29.9	18.7	51.4	252.3	145.9	106.3	83.4	168.7	145.8	120.2	134.0	−1.1	7.3
1971	1,102.7	32.2	18.8	56.5	265.7	153.8	111.9	97.1	183.7	161.4	130.2	145.9	1.8	9.3
1972	1,212.8	37.4	20.2	63.0	292.5	172.6	119.9	108.0	202.6	174.8	144.6	160.1	−1.6	11.2
1973	1,359.3	5[illegible].2	23.4	70.4	326.4	195.4	131.0	118.7	225.6	190.5	163.2	173.1	−4.3	16.2
1974	1,472.8	55.0	36.9	74.5	338.5	201.7	136.7	129.1	246.0	206.7	179.4	189.0	−1.7	19.5
1975	1,598.4	56.3	41.3	76.5	357.3	206.3	151.0	141.7	273.7	221.7	199.8	210.1	2.5	17.5
1976	1,782.8	55.7	46.0	86.2	409.3	239.7	169.7	160.4	299.7	246.1	224.9	229.7	3.6	21.1
1977	1,990.5	58.9	50.2	97.9	465.3	277.7	187.7	178.9	332.8	280.3	253.4	247.4	.0	25.4
1978	2,249.7	70.1	56.5	115.6	518.8	317.4	201.4	201.0	373.5	326.3	289.1	270.3	−1.9	30.5
1979	2,508.2	83.1	72.7	131.4	561.8	345.2	216.5	216.1	415.8	363.3	328.7	292.4	−1.0	43.8
1980	2,732.0	77.2	107.3	137.7	581.0	351.8	229.2	240.8	438.8	400.6	374.0	322.1	4.9	47.6
1981	3,052.6	92.0	143.7	138.4	643.1	385.8	257.3	269.6	483.1	449.3	422.6	354.7	4.1	52.1
1982	3,166.0	89.6	132.1	140.9	634.6	362.5	272.1	288.4	506.5	475.1	463.6	383.9	−.1	51.2
1983	3,405.7	74.3	118.4	149.6	683.2	385.6	297.6	320.0	542.9	536.4	515.5	410.5	5.2	49.9
1984	3,765.0	94.0	125.1	171.1	766.9	446.6	320.3	350.9	610.4	577.0	581.6	442.3	−1.9	47.5
1985	3,998.1	91.5	122.8	182.2	795.8	463.1	332.8	374.4	652.5	626.6	639.4	477.4	−5.5	41.2

Note.—The industry classification is on an establishment basis and is based on the 1972 Standard Industrial Classification.

Source: Department of Commerce, Bureau of Economic Analysis.

TABLE B-11.—*Gross national product by industry in 1982 dollars, 1947–85*

[Billions of 1982 dollars]

Year	Gross national product	Gross domestic product													Rest of the world
		Agriculture, forestry, and fisheries	Mining	Construction	Manufacturing			Transportation and public utilities	Wholesale and retail trade	Finance, insurance, and real estate	Services	Government and government enterprises	Statistical discrepancy	Residual [1]	
					Total	Durable goods	Nondurable goods								
1947	1,066.7	55.6	67.6	76.7	226.1	138.1	88.0	100.0	157.8	103.0	124.7	156.2	7.6	−13.6	5.1
1948	1,108.7	61.3	72.4	90.0	238.5	145.0	93.5	98.7	161.9	107.7	128.9	155.5	−4.9	−7.5	6.2
1949	1,109.0	61.0	65.7	89.4	226.3	133.2	93.1	90.7	166.1	112.2	129.0	164.0	3.2	−4.2	5.6
1950	1,203.7	64.3	72.8	100.0	257.7	156.7	101.0	95.3	182.1	119.7	133.8	169.2	3.1	−.6	6.2
1951	1,328.2	62.6	80.8	110.9	288.4	181.4	107.0	104.9	183.7	126.4	136.9	214.0	9.7	2.0	7.9
1952	1,380.0	64.2	81.5	115.9	298.2	190.6	107.6	104.5	189.5	134.7	139.4	231.9	6.5	5.3	8.3
1953	1,435.3	66.3	84.3	119.9	319.9	208.4	111.5	106.7	195.6	142.2	142.7	230.9	9.4	9.4	7.9
1954	1,416.2	68.2	83.3	124.8	296.6	185.8	110.8	104.1	197.1	149.5	145.9	225.4	9.5	3.5	8.4
1955	1,494.9	69.1	92.0	133.3	327.7	208.5	119.2	112.3	215.0	160.2	153.0	223.4	6.2	−6.6	9.4
1956	1,525.6	67.8	96.5	142.7	330.6	207.3	123.3	117.7	221.5	158.8	161.1	225.6	−6.2	−11.1	10.7
1957	1,551.1	65.9	96.2	142.4	332.5	208.7	123.8	119.9	225.1	178.3	168.6	229.2	−3.8	−14.7	11.5
1958	1,539.2	68.3	89.1	147.5	303.5	180.1	123.4	116.1	225.0	184.5	174.3	230.1	−.5	−8.1	9.5
1959	1,629.1	65.8	94.1	160.4	338.0	203.0	135.0	123.5	240.7	195.9	183.5	232.8	−4.6	−11.0	10.0
1960	1,665.3	68.3	94.2	163.1	338.7	202.4	136.3	127.8	245.4	206.5	190.2	240.3	−8.7	−11.6	11.1
1961	1,708.7	67.5	95.6	165.1	339.4	199.9	139.5	130.0	247.8	215.0	197.7	249.2	−3.7	−6.9	12.1
1962	1,799.4	67.1	98.1	172.5	368.3	220.5	147.8	136.3	263.9	226.5	207.7	258.4	.1	−13.3	13.9
1963	1,873.3	67.2	102.2	177.5	397.4	238.9	158.5	143.8	273.9	235.9	217.4	264.5	−1.8	−19.7	14.9
1964	1,973.3	65.2	105.7	185.9	425.4	259.3	166.2	150.4	290.7	245.8	230.7	274.0	−4.1	−12.6	16.1
1965	2,087.6	66.7	109.4	193.7	462.5	286.9	175.6	161.5	309.8	259.8	240.4	284.3	−3.4	−14.0	17.0
1966	2,208.3	62.4	115.0	194.4	497.9	312.3	185.6	174.2	326.5	271.1	253.9	305.5	5.9	−14.5	15.9
1967	2,271.4	65.4	120.2	190.7	496.6	311.9	184.7	178.1	335.4	282.4	265.2	322.3	−1.0	−.2	16.3
1968	2,365.6	63.6	124.7	190.2	522.0	326.2	195.8	189.5	354.8	296.0	274.7	332.6	−2.8	2.8	17.7
1969	2,423.3	65.3	128.9	183.6	536.7	334.1	202.6	200.3	361.7	314.0	287.8	340.2	−9.5	−2.7	17.0
1970	2,416.2	68.8	134.5	168.0	506.8	304.8	202.0	203.9	367.6	320.7	295.7	339.6	−2.7	−3.9	17.1
1971	2,484.8	70.6	132.4	162.7	515.5	305.5	210.0	209.8	385.7	335.9	302.4	340.0	4.2	4.8	20.7
1972	2,608.5	70.9	134.4	166.7	561.2	336.5	224.8	223.8	414.8	350.9	320.0	340.5	−3.4	5.1	23.7
1973	2,744.1	70.3	133.4	170.4	621.3	377.0	244.3	243.0	437.0	367.7	340.2	343.4	−8.6	−6.2	32.2
1974	2,729.3	69.7	130.3	162.3	591.6	363.5	228.1	248.8	426.2	381.6	347.5	350.6	−3.3	−11.8	35.9
1975	2,695.0	73.1	125.6	149.4	547.5	325.2	222.2	246.4	433.1	387.6	352.4	355.0	4.2	−8.7	29.3
1976	2,826.7	71.5	124.4	158.1	600.6	357.4	243.2	257.1	454.4	403.1	367.7	357.7	5.6	−6.6	33.0
1977	2,958.6	71.6	126.2	165.1	645.0	386.2	258.9	268.5	479.2	417.7	388.4	362.9	.1	−3.4	37.4
1978	3,115.2	71.8	128.8	176.7	683.4	415.9	267.5	284.8	502.3	442.5	411.9	371.5	−2.8	2.1	42.1
1979	3,192.4	76.1	130.0	173.5	697.1	423.5	273.5	293.4	511.7	459.2	429.8	376.2	−1.4	−9.0	55.7
1980	3,187.1	76.2	135.6	161.6	665.4	401.5	263.9	293.4	500.4	464.3	442.6	382.7	5.9	3.5	55.5
1981	3,248.8	88.0	139.8	147.4	676.1	404.9	271.2	296.2	507.3	474.2	462.5	385.3	4.4	12.5	55.2
1982	3,166.0	89.6	132.1	140.9	634.6	362.5	272.1	288.4	506.5	475.1	463.6	383.9	−.1	.0	51.2
1983	3,279.1	74.5	125.4	147.3	675.5	390.4	285.1	300.8	529.1	489.0	486.6	387.4	5.0	10.6	47.9
1984	3,489.9	84.0	133.0	159.9	748.2	451.7	296.4	317.0	578.2	506.1	519.6	392.3	−1.7	9.6	43.9
1985	3,585.2	92.2	130.6	163.1	776.9	481.5	295.4	323.3	604.3	523.9	538.5	399.4	−5.0	1.1	37.0

[1] Equals GNP in constant dollars measured as the sum of incomes less GNP in constant dollars measured as the sum of gross product by industry.

Note.—The industry classification is on an establishment basis and is based on the 1972 Standard Industrial Classification.

Source: Department of Commerce, Bureau of Economic Analysis.

TABLE B-12.—*Gross domestic product of nonfinancial corporate business, 1929–86*

[Billions of dollars; quarterly data at seasonally adjusted annual rates]

Year or quarter	Gross domestic product of nonfinancial corporate business	Capital consumption allowances with capital consumption adjustment	Net domestic product												
			Total	Indirect business tax, etc.[1]	Domestic income										
					Total	Compensation of employees	Corporate profits with inventory valuation and capital consumption adjustments								Net interest
							Total	Profits					Inventory valuation adjustment	Capital consumption adjustment	
								Profits before tax	Profits tax liability	Profits after tax					
										Total	Dividends	Undistributed profits			
1929	50.4	5.3	45.1	3.4	41.8	32.3	8.0	8.4	1.2	7.3	5.1	2.2	0.5	−0.9	1.4
1933	24.6	4.2	20.4	3.8	16.5	16.7	−1.9	.6	.5	.1	2.0	−1.9	−2.1	−.3	1.7
1939	44.0	4.8	39.1	5.1	34.1	28.2	4.4	6.1	1.4	4.7	3.3	1.4	−.7	−1.0	1.5
1940	50.6	5.0	45.6	5.5	40.2	31.2	7.6	8.8	2.7	6.1	3.5	2.6	−.2	−1.0	1.4
1941	65.9	5.4	60.5	6.4	54.1	39.8	13.0	16.4	7.5	9.0	3.9	5.0	−2.5	−1.0	1.3
1942	83.3	6.0	77.3	6.8	70.5	51.0	18.2	20.1	11.2	8.9	3.7	5.2	−1.2	−.7	1.3
1943	99.1	6.1	93.0	7.3	85.7	62.2	22.4	23.6	13.8	9.8	3.9	5.8	−.8	−.4	1.1
1944	102.6	6.2	96.4	8.1	88.3	65.1	22.2	22.2	12.6	9.6	4.1	5.6	−.3	.3	1.0
1945	95.8	6.3	89.5	8.9	80.6	61.9	17.7	17.8	10.2	7.6	4.1	3.5	−.6	.5	1.0
1946	99.8	7.4	92.4	10.1	82.3	67.2	14.4	22.0	8.6	13.4	4.8	8.6	−5.3	−2.3	.7
1947	121.2	9.0	112.2	11.9	100.3	79.1	20.4	29.1	10.8	18.3	5.5	12.8	−5.9	−2.8	.8
1948	138.9	10.5	128.4	13.2	115.2	87.7	26.6	31.8	11.8	20.0	6.0	14.0	−2.2	−3.0	.9
1949	135.2	11.2	123.9	13.9	110.1	85.2	23.9	24.9	9.3	15.6	6.0	9.6	1.9	−2.9	1.0
1950	153.6	12.1	141.5	15.3	126.2	94.7	30.6	38.5	16.9	21.6	7.5	14.1	−5.0	−2.9	.9
1951	176.3	13.9	162.4	16.5	146.0	110.2	34.7	39.1	21.2	17.9	7.1	10.8	−1.2	−3.2	1.1
1952	184.0	14.9	169.1	18.0	151.1	118.2	31.7	33.8	17.8	16.0	7.1	8.8	1.0	−3.0	1.2
1953	196.6	15.9	180.7	19.2	161.5	128.6	31.5	34.9	18.5	16.4	7.3	9.1	−1.0	−2.4	1.3
1954	193.5	16.8	176.7	18.6	158.1	126.4	30.1	32.1	15.6	16.4	7.4	9.0	−.3	−1.6	1.6
1955	218.5	17.9	200.7	20.6	180.0	138.4	40.0	42.0	20.2	21.8	8.5	13.4	−1.7	−.3	1.6
1956	233.6	20.1	213.5	22.4	191.1	151.3	38.1	41.8	20.1	21.8	9.0	12.7	−2.7	−1.1	1.8
1957	244.1	22.1	221.9	23.7	198.2	159.0	37.0	39.8	19.1	20.7	9.3	11.4	−1.5	−1.2	2.2
1958	238.0	23.2	214.8	24.1	190.7	155.8	32.2	33.7	16.2	17.5	9.3	8.2	−.3	−1.2	2.7
1959	267.1	24.3	242.8	26.2	216.7	171.5	42.1	43.1	20.7	22.4	10.0	12.4	−.3	−.8	3.1
1960	277.6	25.3	252.4	28.5	223.9	181.2	39.2	39.7	19.2	20.5	10.6	9.9	−.2	−.2	3.5
1961	285.2	26.0	259.1	29.8	229.4	185.3	40.1	39.5	19.5	20.1	10.6	9.5	.3	.3	4.0
1962	311.1	27.0	284.2	32.2	252.0	200.1	47.3	44.2	20.6	23.5	11.4	12.2	.0	3.1	4.5
1963	331.1	28.2	303.0	34.2	268.7	211.1	52.8	48.9	22.8	26.2	12.6	13.5	.1	3.9	4.8
1964	357.7	29.6	328.0	36.8	291.2	226.7	59.3	55.4	24.0	31.4	13.7	17.7	−.5	4.4	5.3
1965	392.7	31.6	361.1	39.4	321.7	246.5	69.1	65.2	27.2	38.0	15.6	22.4	−1.2	5.2	6.1
1966	430.2	34.5	395.7	40.7	355.0	274.0	73.7	70.3	29.5	40.8	16.8	24.0	−2.1	5.5	7.4
1967	452.6	37.8	414.8	43.3	371.5	292.3	70.5	66.5	27.8	38.6	17.5	21.2	−1.6	5.5	8.8
1968	499.7	41.7	458.0	49.9	408.1	323.2	74.8	73.1	33.6	39.5	19.1	20.4	−3.7	5.3	10.1
1969	542.2	45.7	496.6	54.9	441.6	358.8	69.6	69.6	33.3	36.2	19.1	17.1	−5.9	5.9	13.2
1970	560.4	50.2	510.2	59.0	451.2	378.7	55.4	57.0	27.2	29.8	18.5	11.3	−6.6	5.0	17.1
1971	605.1	55.1	550.0	64.7	485.3	402.0	65.2	65.6	29.9	35.6	18.5	17.1	−4.6	4.2	18.1
1972	671.8	60.5	611.3	69.4	541.9	447.1	75.7	76.8	33.8	43.0	20.1	22.9	−6.6	5.5	19.2
1973	753.0	65.6	687.4	76.5	610.8	505.9	82.4	96.9	40.2	56.7	21.1	35.6	−20.0	5.6	22.5
1974	812.8	76.8	736.0	81.5	654.5	556.8	69.4	107.2	42.2	65.0	21.7	43.3	−39.5	1.7	28.3
1975	881.5	92.5	789.0	88.3	700.7	580.4	91.6	109.2	41.5	67.7	24.8	42.9	−11.0	−6.6	28.7
1976	995.5	103.0	892.5	95.4	797.1	656.3	113.3	138.3	53.0	85.4	27.8	57.6	−14.9	−10.2	27.5
1977	1,126.1	115.1	1,010.9	104.4	906.5	741.0	134.9	160.5	59.9	100.6	32.0	68.6	−16.6	−9.0	30.6
1978	1,274.1	130.8	1,143.3	114.1	1,029.2	847.4	146.0	182.1	67.1	115.0	37.2	77.8	−25.3	−10.9	35.9
1979	1,417.4	150.7	1,266.7	122.1	1,144.7	962.0	139.1	195.8	69.6	126.2	39.3	86.9	−43.2	−13.5	43.5
1980	1,540.8	172.5	1,368.2	138.5	1,229.7	1,051.1	123.1	181.8	67.0	114.8	45.5	69.3	−43.1	−15.5	55.5
1981	1,738.4	200.2	1,538.1	165.9	1,372.3	1,160.5	144.2	181.5	63.9	117.6	53.4	64.2	−24.2	−13.1	67.5
1982	1,782.2	223.0	1,559.3	166.9	1,392.4	1,203.9	111.9	129.7	46.3	83.4	59.7	23.7	−10.4	−7.5	76.6
1983	1,914.2	229.8	1,684.4	182.9	1,501.5	1,266.1	165.6	159.3	59.4	99.9	66.5	33.4	−10.9	17.1	69.8
1984	2,143.7	239.5	1,904.1	203.7	1,700.4	1,401.1	216.7	189.3	74.4	114.9	72.9	42.0	−5.5	32.9	82.6
1985	2,275.1	252.2	2,023.0	216.8	1,806.1	1,491.5	224.2	170.3	66.5	103.8	74.3	29.5	−.6	54.5	90.4
1986 *p*	2,361.5	262.9	2,098.5	226.7	1,871.9	1,555.7	229.2	171.7	75.7	96.1	80.4	15.6	6.3	51.1	87.0
1982: IV	1,779.4	229.7	1,549.7	169.7	1,379.9	1,206.5	100.1	116.3	41.0	75.4	62.2	13.2	−13.4	−2.8	73.4
1983: IV	2,012.5	232.2	1,780.3	189.6	1,590.7	1,319.7	199.5	183.2	70.6	112.7	68.8	43.9	−8.1	24.4	71.5
1984: I	2,081.7	234.9	1,846.7	196.6	1,650.1	1,361.2	214.3	202.2	81.5	120.6	70.1	50.6	−13.6	25.7	74.6
II	2,135.9	238.1	1,897.8	203.3	1,694.5	1,389.3	225.0	201.1	80.8	120.3	74.3	45.9	−4.9	28.9	80.2
III	2,160.3	241.0	1,919.3	206.3	1,713.0	1,414.4	212.5	179.6	69.1	110.5	74.3	36.2	−1.8	34.7	86.1
IV	2,196.8	244.1	1,952.7	208.7	1,744.0	1,439.6	214.9	174.2	66.2	108.0	72.9	35.1	−1.6	42.3	89.5
1985: I	2,226.0	247.3	1,978.7	210.9	1,767.8	1,461.8	214.6	164.9	63.6	101.3	69.1	32.1	−.5	50.2	91.4
II	2,259.1	250.7	2,008.4	217.1	1,791.3	1,482.2	218.2	161.1	61.5	99.6	80.6	19.1	1.6	55.5	90.9
III	2,301.3	253.9	2,047.4	218.2	1,829.2	1,498.4	240.8	177.5	70.5	107.0	72.8	34.1	6.1	57.2	89.9
IV	2,314.1	256.8	2,057.3	221.1	1,836.2	1,523.5	223.3	177.5	70.3	107.2	74.6	32.6	−9.4	55.2	89.3
1986: I	2,343.6	258.7	2,084.9	227.6	1,857.4	1,542.8	225.5	156.3	68.7	87.6	74.8	12.8	16.5	52.7	89.1
II	2,341.5	261.9	2,079.6	220.1	1,859.5	1,545.7	225.9	165.7	71.7	94.0	85.6	8.3	10.6	49.7	87.8
III	2,370.0	264.2	2,105.8	230.0	1,875.8	1,557.0	232.7	176.8	77.9	98.9	79.8	19.1	6.1	49.7	86.1
IV *p*	....	267.0	....	229.1	....	1,577.1	....	....	....	....	81.4	....	−8.0	52.3	85.0

[1] Indirect business tax and nontax liability plus business transfer payments less subsidies.

Source: Department of Commerce, Bureau of Economic Analysis.

TABLE B–13.—*Output, costs, and profits of nonfinancial corporate business, 1948–86*

[Quarterly data at seasonally adjusted annual rates]

Year or quarter	Gross domestic product of nonfinancial corporate business (billions of dollars)		Current-dollar cost and profit per unit of output (dollars)[1]								Output per hour of all employees (1982 dollars)	Compensation per hour of all employees (dollars)
	Current dollars	1982 dollars	Total cost and profit[2]	Capital consumption allowances with capital consumption adjustment	Indirect business tax, etc.[3]	Compensation of employees	Corporate profits with inventory valuation and capital consumption adjustments			Net interest		
							Total	Profits tax liability	Profits after tax[4]			
1948	138.9	538.9	0.258	0.019	0.025	0.163	0.049	0.022	0.027	0.002	....	....
1949	135.2	515.7	.262	.022	.027	.165	.046	.018	.028	.002	....	....
1950	153.6	570.4	.269	.021	.027	.166	.054	.030	.024	.002	....	....
1951	176.3	622.4	.283	.022	.026	.177	.056	.034	.022	.002	....	....
1952	184.0	637.3	.289	.023	.028	.185	.050	.028	.022	.002	....	....
1953	196.6	668.4	.294	.024	.029	.192	.047	.028	.020	.002	....	....
1954	193.5	650.8	.297	.026	.029	.194	.046	.024	.022	.002	....	....
1955	218.5	719.3	.304	.025	.029	.192	.056	.028	.028	.002	....	....
1956	233.6	747.0	.313	.027	.030	.203	.051	.027	.024	.002	....	....
1957	244.1	758.1	.322	.029	.031	.210	.049	.025	.024	.003	....	....
1958	238.0	725.2	.328	.032	.033	.215	.044	.022	.022	.004	12.053	2.589
1959	267.1	798.5	.335	.030	.033	.215	.053	.026	.027	.004	12.506	2.685
1960	277.6	820.8	.338	.031	.035	.221	.048	.023	.024	.004	12.672	2.797
1961	285.2	839.1	.340	.031	.035	.221	.048	.023	.025	.005	13.058	2.884
1962	311.1	904.8	.344	.030	.036	.221	.052	.023	.029	.005	13.550	2.997
1963	331.1	964.4	.343	.029	.035	.219	.055	.024	.031	.005	14.135	3.093
1964	357.7	1,029.0	.348	.029	.036	.220	.058	.023	.034	.005	14.655	3.229
1965	392.7	1,111.7	.353	.028	.035	.222	.062	.024	.038	.005	14.979	3.321
1966	430.2	1,189.5	.362	.029	.034	.230	.062	.025	.037	.006	15.205	3.502
1967	452.6	1,217.0	.372	.031	.036	.240	.058	.023	.035	.007	15.344	3.685
1968	499.7	1,286.5	.388	.032	.039	.251	.058	.026	.032	.008	15.715	3.948
1969	542.2	1,339.6	.405	.034	.041	.268	.052	.025	.027	.010	15.700	4.206
1970	560.4	1,325.2	.423	.038	.045	.286	.042	.021	.021	.013	15.713	4.490
1971	605.1	1,360.6	.445	.040	.048	.295	.048	.022	.026	.013	16.158	4.774
1972	671.8	1,461.1	.460	.041	.048	.306	.052	.023	.029	.013	16.490	5.045
1973	753.0	1,569.7	.480	.042	.049	.322	.053	.026	.027	.014	16.832	5.425
1974	812.8	1,533.4	.530	.050	.053	.363	.045	.028	.018	.018	16.331	5.930
1975	881.5	1,488.1	.592	.062	.059	.390	.062	.028	.034	.019	16.691	6.510
1976	995.5	1,583.5	.629	.065	.060	.414	.072	.033	.038	.017	16.986	7.040
1977	1,126.1	1,686.6	.668	.068	.062	.439	.080	.036	.044	.018	17.257	7.581
1978	1,274.1	1,789.8	.712	.073	.064	.473	.082	.037	.044	.020	17.358	8.219
1979	1,417.4	1,840.4	.770	.082	.066	.523	.076	.038	.038	.024	17.221	9.002
1980	1,540.8	1,807.9	.852	.095	.077	.581	.068	.037	.031	.031	17.096	9.939
1981	1,738.4	1,837.2	.946	.109	.090	.632	.078	.035	.044	.037	17.194	10.861
1982	1,782.2	1,782.2	1.000	.125	.094	.676	.063	.026	.037	.043	17.318	11.699
1983	1,914.2	1,886.0	1.026	.123	.098	.679	.089	.032	.057	.037	17.867	12.124
1984	2,143.7	2,030.8	1.056	.118	.100	.690	.107	.037	.070	.041	18.224	12.574
1985	2,275.1	2,105.5	1.081	.120	.103	.708	.106	.032	.075	.043	18.436	13.060
1986 ᵖ	2,361.5	2,144.9	1.101	.123	.106	.725	.107	.035	.072	.041	....	....
1982: IV	1,779.4	1,760.2	1.011	.131	.096	.685	.057	.023	.034	.042	17.383	11.915
1983: IV	2,012.2	1,940.5	1.037	.120	.098	.680	.103	.036	.066	.037	18.027	12.259
1984: I	2,081.7	1,993.8	1.044	.118	.099	.683	.107	.041	.067	.037	18.172	12.406
II	2,135.9	2,031.6	1.051	.117	.100	.684	.111	.040	.071	.039	18.275	12.498
III	2,160.3	2,038.4	1.060	.118	.101	.694	.104	.034	.070	.042	18.201	12.630
IV	2,196.8	2,059.4	1.067	.119	.101	.699	.104	.032	.072	.043	18.250	12.758
1985: I	2,226.0	2,075.7	1.072	.119	.102	.704	.103	.031	.073	.044	18.285	12.878
II	2,259.1	2,094.4	1.079	.120	.104	.708	.104	.029	.075	.043	18.384	13.011
III	2,301.3	2,124.6	1.083	.119	.103	.705	.113	.033	.080	.042	18.604	13.121
IV	2,314.1	2,127.3	1.088	.121	.104	.716	.105	.033	.072	.042	18.472	13.229
1986: I	2,343.6	2,141.0	1.095	.121	.106	.721	.105	.032	.073	.042	18.449	13.294
II	2,341.5	2,135.3	1.097	.123	.103	.724	.106	.034	.072	.041	18.438	13.347
III ᵖ	2,370.0	2,142.2	1.106	.123	.107	.727	.109	.036	.072	.040	18.450	13.407

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[1] Output is measured by gross domestic product of nonfinancial corporate business in 1982 dollars.

[2] This is equal to the deflator for gross domestic product of nonfinancial corporate business with the decimal point shifted two places to the left.

[3] Indirect business tax and nontax liability plus business transfer payments less subsidies.

[4] With inventory valuation and capital consumption adjustments.

Source: Department of Commerce (Bureau of Economic Analysis) and Department of Labor (Bureau of Labor Statistics).

TABLE B-14.—*Personal consumption expenditures, 1929–86*

[Billions of dollars; quarterly data at seasonally adjusted annual rates]

Year or quarter	Personal consumption expenditures	Durable goods	Nondurable goods	Services	Durable goods			Nondurable goods	
					Motor vehicles and parts	Furniture and household equipment	Other	Food	Clothing and shoes
1929	77.3	9.2	37.7	30.4	3.3	4.7	1.2	19.5	9.4
1933	45.8	3.5	22.3	20.1	1.1	1.9	.5	11.5	4.6
1939	67.0	6.7	35.1	25.2	2.3	3.4	1.0	19.1	7.1
1940	71.0	7.8	37.0	26.2	2.8	3.8	1.1	20.2	7.5
1941	80.8	9.7	42.9	28.3	3.5	4.8	1.3	23.4	8.8
1942	88.6	6.9	50.8	31.0	.7	4.6	1.6	28.4	11.0
1943	99.5	6.5	58.6	34.3	.8	3.9	1.9	33.2	13.4
1944	108.2	6.7	64.3	37.2	.8	3.8	2.1	36.7	14.6
1945	119.6	8.0	71.9	39.7	1.0	4.5	2.5	40.6	16.5
1946	143.9	15.8	82.7	45.4	4.1	8.4	3.2	47.4	18.2
1947	161.9	20.4	90.9	50.6	6.6	10.6	3.3	52.3	18.8
1948	174.9	22.9	96.6	55.5	8.0	11.5	3.4	54.2	20.1
1949	178.3	25.0	94.9	58.4	10.6	11.3	3.2	52.5	19.3
1950	192.1	30.8	98.2	63.2	13.7	13.7	3.3	53.9	19.6
1951	208.1	29.9	109.2	69.0	12.2	14.1	3.6	60.7	21.3
1952	219.1	29.3	114.7	75.1	11.3	14.0	3.9	64.1	22.0
1953	232.6	32.7	117.8	82.1	13.9	14.7	4.1	65.4	22.2
1954	239.8	32.1	119.7	88.0	13.0	14.8	4.3	66.8	22.3
1955	257.9	38.9	124.7	94.3	17.8	16.4	4.6	68.6	23.3
1956	270.6	38.2	130.8	101.6	15.8	17.3	5.0	71.4	24.4
1957	285.3	39.7	137.1	108.5	17.3	17.2	5.2	75.1	24.5
1958	294.6	37.2	141.7	115.7	14.8	16.9	5.4	77.9	24.9
1959	316.3	42.8	148.5	125.0	18.9	18.1	5.8	80.7	26.4
1960	330.7	43.5	153.2	134.0	19.7	18.0	5.8	82.7	27.0
1961	341.1	41.9	157.4	141.8	17.8	18.3	5.8	84.8	27.6
1962	361.9	47.0	163.8	151.1	21.5	19.3	6.3	87.1	29.0
1963	381.7	51.8	169.4	160.6	24.4	20.7	6.8	89.5	29.8
1964	409.3	56.8	179.7	172.8	26.0	23.2	7.6	94.6	32.4
1965	440.7	63.5	191.9	185.4	29.9	25.1	8.4	101.0	34.1
1966	477.3	68.5	208.5	200.3	30.3	28.2	10.0	109.0	37.4
1967	503.6	70.6	216.9	216.0	30.0	30.0	10.6	112.3	39.2
1968	552.5	81.0	235.0	236.4	36.1	32.9	12.0	121.6	43.2
1969	597.9	86.2	252.2	259.4	38.4	34.7	13.2	130.5	46.5
1970	640.0	85.7	270.3	284.0	35.9	35.7	14.1	142.1	47.8
1971	691.6	97.6	283.3	310.7	44.9	37.8	14.9	147.5	51.7
1972	757.6	111.2	305.1	341.3	51.5	42.4	17.2	158.5	56.4
1973	837.2	124.7	339.6	373.0	56.7	47.9	20.1	176.1	62.5
1974	916.5	123.8	380.9	411.9	50.3	51.5	22.0	198.2	66.0
1975	1,012.8	135.4	416.2	461.2	55.8	54.5	25.0	218.7	70.8
1976	1,129.3	161.5	452.0	515.9	72.7	60.2	28.5	236.2	76.6
1977	1,257.2	184.5	490.4	582.3	85.4	67.1	32.0	255.9	84.1
1978	1,403.5	205.6	541.8	656.1	95.1	73.9	36.6	282.2	94.8
1979	1,566.8	219.0	613.2	734.6	96.9	82.1	40.0	317.3	102.2
1980	1,732.6	219.3	681.4	831.9	90.3	86.2	42.8	349.1	109.0
1981	1,915.1	239.9	740.6	934.7	100.5	92.7	46.6	376.5	119.9
1982	2,050.7	252.7	771.0	1,027.0	108.9	95.7	48.1	398.8	124.4
1983	2,234.5	289.1	816.7	1,128.7	130.4	107.1	51.6	421.9	135.1
1984	2,428.2	331.2	870.1	1,227.0	154.5	118.9	57.8	449.9	147.2
1985	2,600.5	359.3	905.1	1,336.1	169.2	126.8	63.3	469.3	155.2
1986 [p]	2,762.4	388.3	932.7	1,441.3	182.3	137.0	69.0	492.8	164.8
1982: IV	2,117.0	263.8	786.6	1,066.5	115.7	99.1	49.0	407.0	126.5
1983: IV	2,315.8	310.0	837.9	1,167.9	144.4	112.4	53.2	430.8	141.1
1984: I	2,363.8	321.2	855.7	1,186.9	150.4	115.6	55.2	440.4	144.4
II	2,416.1	331.3	870.3	1,214.5	155.8	118.3	57.2	447.9	148.2
III	2,445.6	331.8	873.9	1,239.9	154.4	119.2	58.3	454.3	146.6
IV	2,487.2	340.4	880.3	1,266.5	157.6	122.3	60.4	456.9	149.7
1985: I	2,530.9	347.7	888.2	1,294.9	162.3	123.5	61.9	461.2	151.7
II	2,576.0	354.0	902.3	1,319.7	165.3	125.9	62.8	468.3	155.0
III	2,627.1	373.3	907.4	1,346.4	182.8	126.8	63.7	470.4	155.4
IV	2,667.9	362.0	922.6	1,383.2	166.4	130.9	64.7	477.4	158.7
1986: I	2,697.9	360.8	929.7	1,407.4	163.5	132.1	65.3	484.6	161.3
II	2,732.0	373.9	928.4	1,429.8	172.0	135.8	66.0	490.3	165.0
III	2,799.8	414.5	932.8	1,452.4	204.7	140.0	69.8	494.0	166.6
IV [p]	2,819.9	404.2	940.0	1,475.7	189.0	140.2	75.0	502.2	166.2

See next page for continuation of table.

TABLE B-14.—*Personal consumption expenditures, 1929–86*—Continued

[Billions of dollars; quarterly data at seasonally adjusted annual rates]

Year or quarter	Nondurable goods—cont'd			Services						
	Gasoline and oil	Fuel oil and coal	Other	Housing [1]	Household operation			Transportation	Medical care	Other
					Total	Electricity and gas	Other			
1929	1.8	1.6	5.4	11.7	4.0	1.2	2.9	2.6	2.2	9.9
1933	1.5	1.2	3.5	8.1	2.8	1.1	1.7	1.5	1.5	6.3
1939	2.2	1.4	5.3	9.4	3.8	1.4	2.4	2.0	2.1	8.0
1940	2.3	1.5	5.6	9.7	4.0	1.5	2.6	2.1	2.2	8.2
1941	2.6	1.7	6.4	10.4	4.3	1.5	2.7	2.4	2.4	8.9
1942	2.1	1.9	7.5	11.2	4.8	1.6	3.2	2.7	2.7	9.6
1943	1.3	2.0	8.7	11.8	5.2	1.7	3.5	3.4	2.9	11.0
1944	1.4	2.0	9.6	12.3	5.9	1.8	4.1	3.7	3.3	12.0
1945	1.8	2.2	10.8	12.8	6.4	1.9	4.5	4.0	3.6	12.9
1946	3.4	2.5	11.3	14.2	6.8	2.1	4.7	5.0	4.6	15.0
1947	4.0	3.0	12.8	16.0	7.5	2.3	5.1	5.3	5.6	16.3
1948	4.8	3.4	14.1	17.9	8.1	2.6	5.4	5.8	6.3	17.4
1949	5.3	3.1	14.7	19.6	8.5	2.9	5.6	5.9	6.5	17.8
1950	5.5	3.4	15.8	21.7	9.5	3.3	6.2	6.2	6.9	18.8
1951	6.1	3.5	17.6	24.3	10.4	3.7	6.7	6.8	7.4	20.1
1952	6.8	3.5	18.4	27.0	11.2	4.1	7.1	7.3	8.3	21.4
1953	7.4	3.4	19.4	29.9	12.1	4.5	7.6	8.0	9.3	22.9
1954	7.8	3.5	19.3	32.3	12.7	5.0	7.7	8.2	10.2	24.6
1955	8.6	3.8	20.4	34.4	14.2	5.5	8.6	8.5	10.8	26.5
1956	9.4	3.9	21.7	36.7	15.4	6.1	9.3	8.9	11.7	28.9
1957	10.2	4.1	23.2	39.3	16.3	6.5	9.8	9.4	12.8	30.7
1958	10.6	4.2	24.2	42.0	17.4	7.1	10.4	9.7	14.0	32.5
1959	11.3	4.0	26.1	45.0	18.7	7.6	11.1	10.5	15.3	35.4
1960	12.0	3.8	27.7	48.2	20.3	8.3	11.9	11.2	16.4	38.0
1961	12.0	3.8	29.2	51.2	21.2	8.8	12.3	11.7	17.5	40.3
1962	12.6	3.8	31.4	54.7	22.4	9.4	12.9	12.2	19.4	42.4
1963	13.0	4.0	33.1	58.0	23.6	9.9	13.7	12.7	21.0	45.3
1964	13.6	4.1	35.0	61.4	25.0	10.4	14.6	13.4	24.1	48.9
1965	14.8	4.4	37.6	65.4	26.5	10.9	15.6	14.5	25.9	53.1
1966	16.0	4.7	41.4	69.5	28.2	11.5	16.7	15.9	28.3	58.5
1967	17.1	4.8	43.5	74.1	30.1	12.2	17.9	17.3	31.1	63.5
1968	18.6	4.7	47.0	79.7	32.3	13.0	19.3	18.9	35.7	69.9
1969	20.5	4.6	50.2	86.8	35.0	14.0	21.0	20.9	40.9	75.8
1970	21.9	4.4	54.1	94.0	37.7	15.2	22.5	23.7	46.1	82.5
1971	23.2	4.6	56.4	102.7	40.9	16.6	24.3	27.1	51.8	88.2
1972	24.4	5.1	60.8	112.1	45.2	18.4	26.8	29.8	57.8	96.5
1973	28.1	6.3	66.6	123.1	49.6	20.0	29.6	31.2	64.4	104.7
1974	36.1	7.8	72.7	135.1	55.4	23.5	31.9	33.3	72.4	115.7
1975	39.7	8.4	78.5	148.4	63.5	28.5	35.0	35.7	84.2	129.3
1976	43.0	10.1	86.0	163.5	72.3	32.5	39.8	41.3	95.9	142.9
1977	46.9	11.1	92.4	182.4	81.7	37.6	44.1	49.2	111.5	157.5
1978	51.3	12.0	101.4	205.2	90.9	42.1	48.8	53.5	125.1	181.4
1979	66.1	15.8	111.8	231.1	100.3	46.8	53.4	59.0	141.4	202.7
1980	83.7	18.0	121.5	261.5	113.9	56.4	57.5	64.5	164.2	227.9
1981	92.7	19.4	132.2	295.6	127.5	63.5	64.0	68.3	193.5	249.7
1982	89.1	18.6	140.1	321.1	143.4	72.8	70.6	69.7	217.8	275.1
1983	90.2	17.5	152.1	344.1	156.0	80.0	76.0	74.8	238.3	315.5
1984	90.7	17.9	164.3	372.2	166.6	84.8	81.8	82.0	263.2	342.9
1985	91.9	15.7	172.9	403.9	175.0	89.9	85.1	88.7	290.1	378.4
1986 p	78.7	14.0	182.5	438.5	178.4	87.3	91.1	95.9	315.9	412.6
1982: IV	89.8	18.2	145.2	330.3	148.0	74.8	73.2	71.1	226.9	290.2
1983: IV	91.9	18.1	155.9	353.8	161.4	84.1	77.3	77.6	246.9	328.1
1984: I	92.0	18.9	160.0	360.2	162.5	81.5	81.0	79.5	252.1	332.5
II	91.7	18.3	164.2	368.2	166.6	84.7	81.9	81.6	259.4	338.6
III	89.4	17.7	165.9	376.6	168.2	86.2	82.0	82.2	267.0	346.0
IV	89.9	16.6	167.3	383.8	169.3	86.9	82.4	84.9	274.1	354.5
1985: I	89.6	15.9	169.9	390.6	175.0	93.1	82.0	86.8	278.6	364.0
II	92.8	15.3	170.9	399.1	171.4	86.5	84.9	88.1	287.7	373.4
III	92.4	15.5	173.6	408.6	175.1	88.7	86.4	88.9	291.5	382.1
IV	93.0	16.2	177.3	417.4	178.3	91.3	87.0	90.9	302.5	394.1
1986: I	87.6	14.9	181.3	424.8	174.3	86.3	88.0	93.5	307.9	406.9
II	78.1	13.7	181.2	434.7	177.6	86.9	90.6	95.0	312.3	410.3
III	74.2	13.7	184.3	442.8	181.7	89.2	92.5	96.8	318.1	413.0
IV p	74.9	13.5	183.2	452.0	180.0	86.8	93.2	98.2	325.4	420.2

[1] Includes imputed rental value of owner-occupied housing.

Source: Department of Commerce, Bureau of Economic Analysis.

Table B-15.—*Gross and net private domestic investment, 1929–86*

[Billions of dollars; quarterly data at seasonally adjusted annual rates]

Year or quarter	Gross private domestic investment	Less: Capital consumption allowances with capital consumption adjustment	Equals: Net private domestic investment						
			Total	Net fixed investment					Change in business inventories
				Total	Nonresidential			Residential	
					Total	Structures	Producers' durable equipment		
1929	16.7	9.9	6.7	5.0	3.3	1.8	1.4	1.7	1.7
1933	1.6	7.6	−6.1	−4.5	−3.5	−1.7	−1.8	−1.0	−1.6
1939	9.5	9.0	.5	.1	−.7	−1.1	.4	.8	.4
1940	13.4	9.4	4.1	1.9	.7	−.8	1.5	1.2	2.2
1941	18.3	10.3	8.0	3.5	2.0	−.3	2.3	1.5	4.5
1942	10.3	11.3	−1.0	−2.7	−2.1	−1.7	−.5	−.6	1.8
1943	6.2	11.6	−5.3	−4.7	−3.1	−2.4	−.7	−1.6	−.6
1944	7.7	12.0	−4.2	−3.2	−1.3	−1.9	.5	−1.9	−1.0
1945	11.3	12.4	−1.1	−.1	1.7	−1.0	2.8	−1.8	−1.0
1946	31.5	14.2	17.3	10.9	6.9	2.4	4.5	4.0	6.4
1947	35.0	17.6	17.5	17.9	10.7	1.9	8.7	7.3	−.5
1948	47.1	20.4	26.7	22.0	11.8	2.5	9.3	10.2	4.7
1949	36.5	22.0	14.5	17.6	8.7	2.2	6.5	8.9	−3.1
1950	55.1	23.6	31.5	24.6	10.3	2.8	7.5	14.4	6.8
1951	60.5	27.2	33.3	23.1	11.6	3.9	7.7	11.5	10.2
1952	53.5	29.2	24.4	21.3	10.1	3.8	6.4	11.2	3.1
1953	54.9	30.9	24.0	23.6	11.9	4.8	7.1	11.7	.4
1954	54.1	32.5	21.6	23.3	10.2	5.0	5.2	13.0	−1.6
1955	69.7	34.4	35.3	29.6	13.2	5.9	7.3	16.4	5.7
1956	72.7	38.1	34.6	29.9	15.6	7.9	7.7	14.4	4.6
1957	71.1	41.1	29.9	28.5	15.9	7.9	8.1	12.6	1.4
1958	63.6	42.8	20.8	22.3	9.6	6.3	3.2	12.7	−1.5
1959	80.2	44.6	35.5	29.8	12.1	6.4	5.7	17.7	5.8
1960	78.2	46.4	31.8	28.7	13.4	7.3	6.1	15.4	3.1
1961	77.1	47.8	29.4	27.0	11.9	7.3	4.6	15.1	2.4
1962	87.6	49.4	38.2	32.1	14.9	8.0	6.9	17.2	6.1
1963	93.1	51.4	41.8	35.9	16.0	7.9	8.1	19.9	5.8
1964	99.6	53.9	45.7	40.3	20.3	9.4	10.9	20.0	5.4
1965	116.2	57.4	58.8	48.9	29.3	13.2	16.1	19.6	9.9
1966	128.6	62.1	66.5	52.3	35.8	15.2	20.7	16.5	14.2
1967	125.7	67.4	58.3	48.0	32.3	14.4	18.0	15.7	10.3
1968	137.0	73.9	63.1	55.2	34.2	15.1	19.0	21.0	7.9
1969	153.2	81.4	71.8	62.0	39.8	17.4	22.4	22.2	9.8
1970	148.8	88.8	60.0	56.9	36.8	17.4	19.4	20.1	3.1
1971	172.5	97.5	74.9	67.2	34.5	16.8	17.7	32.7	7.8
1972	202.0	107.9	94.1	83.6	40.5	17.4	23.1	43.1	10.5
1973	238.8	118.1	120.7	101.1	56.2	21.7	34.4	45.0	19.6
1974	240.8	137.5	103.4	87.9	55.8	22.0	33.7	32.2	15.4
1975	219.6	161.8	57.8	63.4	37.5	15.6	21.9	25.9	−5.6
1976	277.7	179.2	98.4	82.4	40.9	16.0	24.8	41.6	16.0
1977	344.1	201.5	142.5	121.3	58.6	17.6	41.0	62.6	21.3
1978	416.8	229.9	186.9	158.3	82.2	25.0	57.2	76.1	28.6
1979	454.8	265.8	189.1	176.1	98.9	34.5	64.5	77.2	13.0
1980	437.0	303.8	133.1	141.5	88.9	39.4	49.5	52.6	−8.3
1981	515.5	347.8	167.7	143.7	98.6	51.7	46.9	45.0	24.0
1982	447.3	383.2	64.1	88.7	65.5	45.9	19.6	23.2	−24.5
1983	502.3	396.6	105.7	112.8	45.8	25.9	19.9	67.0	−7.1
1984	662.1	415.1	247.0	182.9	92.0	38.1	53.9	90.8	64.1
1985	661.1	437.2	223.9	212.8	117.2	48.4	68.8	95.6	11.1
1986 ᵖ	686.4	455.1	231.3	219.9					11.4
1982: IV	409.6	393.2	16.4	76.3					−59.9
1983: IV	579.8	400.8	179.0	148.0					31.0
1984: I	659.5	405.5	254.0	158.5					95.5
II	657.5	413.0	244.5	184.6					59.9
III	670.3	418.5	251.8	187.4					54.4
IV	661.1	423.3	237.8	201.1					36.7
1985: I	650.6	427.8	222.8	197.4					25.4
II	667.1	433.1	234.0	214.9					19.1
III	657.4	441.3	216.1	213.0					3.1
IV	669.5	446.7	222.8	225.9					−3.1
1986: I	708.3	447.1	261.2	217.4					43.8
II	687.3	453.3	234.0	219.5					14.5
III	675.8	457.6	218.2	222.7					−4.5
IV ᵖ	674.5	462.5	212.0	220.3					−8.3

Source: Department of Commerce, Bureau of Economic Analysis.

TABLE B–16.—*Gross and net private domestic investment in 1982 dollars, 1929–86*

[Billions of 1982 dollars; quarterly data at seasonally adjusted annual rates]

Year or quarter	Gross private domestic investment	Less: Capital consumption allowances with capital consumption adjustment	Equals: Net private domestic investment						
			Total	Net fixed investment					Change in business inventories
				Total	Nonresidential			Residential	
					Total	Structures	Producers' durable equipment		
1929	139.2	86.8	52.4	41.6	26.2	16.8	9.4	15.4	10.8
1933	22.7	86.5	-63.8	-53.0	-40.2	-24.3	-16.0	-12.8	-10.7
1939	86.0	84.4	1.6	-2.3	-10.1	-12.0	1.9	7.8	3.9
1940	111.8	84.9	26.9	12.5	1.5	-8.5	10.0	11.1	14.4
1941	138.8	86.3	52.5	24.7	12.0	-3.5	15.6	12.7	27.8
1942	76.7	86.9	-10.2	-22.1	-17.5	-15.9	-1.6	-4.6	12.0
1943	50.4	85.7	-35.3	-36.0	-24.4	-20.7	-3.8	-11.5	.7
1944	56.4	84.8	-28.4	-23.3	-10.5	-15.2	4.7	-12.8	-5.2
1945	76.5	85.4	-8.9	-.5	10.5	-8.3	18.8	-11.0	-8.4
1946	178.1	88.0	90.1	62.2	39.5	15.4	24.1	22.7	27.9
1947	177.9	91.8	86.1	87.1	52.6	11.7	40.9	34.5	-1.0
1948	208.2	96.8	111.4	99.1	54.3	14.3	40.0	44.8	12.3
1949	168.8	101.7	67.1	76.7	37.9	12.7	25.2	38.9	-9.7
1950	234.9	106.5	128.4	104.2	43.3	15.7	27.6	60.9	24.2
1951	235.2	111.8	123.3	92.5	46.9	18.8	28.1	45.6	30.8
1952	211.8	117.0	94.8	84.8	41.7	18.8	22.9	43.2	10.0
1953	216.6	122.1	94.4	91.7	47.0	22.9	24.1	44.7	2.8
1954	212.6	127.4	85.2	90.0	40.4	24.4	16.0	49.6	-4.8
1955	259.8	132.6	127.2	110.9	49.9	27.7	22.2	60.9	16.3
1956	257.8	138.3	119.5	106.5	54.9	32.5	22.4	51.6	12.9
1957	243.4	143.5	99.9	96.9	51.7	30.7	20.9	45.2	3.0
1958	221.4	147.7	73.7	77.1	31.5	24.8	6.6	45.6	-3.4
1959	270.3	151.9	118.4	101.9	38.5	25.0	13.6	63.4	16.5
1960	260.5	156.3	104.1	96.4	41.4	27.9	13.6	55.0	7.7
1961	259.1	160.6	98.4	91.2	37.3	28.1	9.3	53.8	7.3
1962	288.6	165.1	123.5	107.3	46.4	30.3	16.0	51.0	16.2
1963	307.1	170.3	136.8	120.1	49.2	29.1	20.1	70.9	16.6
1964	325.9	176.3	149.6	133.9	63.3	34.0	29.2	70.6	15.7
1965	367.0	183.7	183.4	158.1	90.4	46.2	44.2	67.7	25.2
1966	390.5	192.2	198.3	161.4	106.3	50.4	55.8	55.1	36.9
1367	374.4	201.1	173.4	144.6	93.6	45.9	47.7	50.9	28.8
1968	391.8	209.8	181.9	160.9	96.1	46.7	49.3	64.8	21.0
1969	410.3	219.8	190.5	165.3	103.1	49.7	53.4	62.2	25.1
1970	381.5	229.8	151.8	143.6	89.3	46.1	43.3	54.2	8.2
1971	419.3	239.5	179.8	160.2	76.1	40.4	35.7	84.1	19.6
1972	465.4	253.4	212.1	190.3	85.3	39.8	45.5	105.0	21.8
1973	520.8	263.6	257.1	217.1	116.5	46.8	69.8	100.6	40.0
1974	481.3	276.1	205.3	172.0	106.9	42.5	64.4	65.1	33.3
1975	383.3	287.0	96.3	109.1	60.8	27.9	32.9	48.3	-12.8
1976	453.5	297.3	156.2	134.1	61.8	27.3	34.6	72.2	22.1
1977	521.3	309.6	211.7	182.6	85.2	28.7	56.5	97.4	29.1
1978	576.9	323.7	253.3	216.5	111.6	37.2	74.3	104.9	36.8
1979	575.2	341.3	234.0	218.9	124.3	44.8	79.5	94.6	15.0
1980	509.3	356.1	153.2	160.1	101.3	47.2	54.1	58.7	-6.9
1981	545.5	369.7	175.8	152.0	105.5	56.0	49.4	46.5	23.9
1982	447.3	383.2	64.1	88.7	65.5	45.9	19.6	23.2	-24.5
1983	504.0	394.4	109.6	116.0	50.4	26.2	24.1	65.6	-6.4
1984	652.0	407.1	244.8	185.6	100.3	37.4	62.9	85.4	59.2
1985	647.7	425.6	222.0	213.0	124.9	44.4	80.5	88.1	9.0
1986 p	659.7	441.0	218.7	207.9					10.8
1982: IV	408.8	390.0	18.8	78.0					-59.3
1983: IV	577.2	397.9	179.3	152.3					27.0
1984: I	649.3	401.3	248.0	162.9					85.1
II	649.7	405.0	244.7	187.7					57.0
III	658.9	409.0	249.9	189.3					60.6
IV	649.9	413.2	236.7	202.8					33.9
1985: I	638.2	417.5	220.7	197.5					23.2
II	655.6	421.9	233.7	216.3					17.4
III	643.8	429.4	214.4	213.7					.7
IV	653.2	433.7	219.5	224.7					-5.2
1986: I	684.0	434.8	249.2	209.3					39.9
II	664.7	439.1	225.6	210.5					15.1
III	651.3	443.2	208.1	208.4					-.3
IV p	638.8	447.0	191.8	203.3					-11.5

Source: Department of Commerce, Bureau of Economic Analysis.

TABLE B–17.—*Inventories and final sales of business, 1946–86*

[Billions of dollars, except as noted; seasonally adjusted]

Quarter	Inventories [1]							Final sales [3]	Inventory-final sales ratio	
	Total [2]	Farm	Nonfarm						Total	Nonfarm [4]
			Total [2]	Manufacturing	Wholesale trade	Retail trade	Other			
Fourth quarter:										
1946	71.0	19.6	51.4	24.6	10.4	12.8	3.2	15.8	4.48	3.24
1947	80.3	21.0	59.3	29.0	11.1	14.5	4.1	18.4	4.36	3.22
1948	85.6	19.3	66.3	32.2	12.5	16.6	4.5	19.8	4.33	3.35
1949	77.5	16.7	60.8	28.6	12.5	15.4	3.9	19.7	3.94	3.09
1950	96.7	22.5	74.2	34.9	14.7	19.2	4.9	21.8	4.44	3.41
1951	109.4	24.9	84.5	43.1	15.6	19.7	5.5	24.9	4.40	3.40
1952	108.6	23.3	85.3	44.0	15.6	19.4	5.6	26.4	4.11	3.23
1953	109.6	22.0	87.6	46.0	15.8	20.0	5.2	27.5	3.98	3.18
1954	107.3	21.2	86.1	43.9	16.1	20.2	5.3	28.0	3.84	3.08
1955	114.6	19.9	94.7	48.3	17.6	22.8	5.4	30.2	3.80	3.14
1956	123.4	19.9	103.5	54.0	18.9	23.7	6.2	31.9	3.87	3.24
1957	127.0	21.2	105.8	54.3	19.2	25.0	6.6	33.3	3.82	3.18
1958	126.2	22.6	103.7	52.7	19.3	25.1	6.6	34.3	3.68	3.02
1959	131.7	22.1	109.6	55.2	21.0	26.2	7.2	36.2	3.64	3.03
1960	135.5	23.3	112.2	56.2	21.3	27.5	7.2	37.5	3.61	2.99
1961	137.2	23.8	113.4	57.2	21.8	27.0	7.4	39.5	3.47	2.87
1962	143.8	25.2	118.6	60.3	22.4	28.3	7.5	41.8	3.44	2.84
1963	149.6	25.7	123.8	62.2	23.9	29.6	8.0	44.5	3.36	2.78
1964	155.3	24.5	130.9	65.9	25.2	31.0	8.8	47.1	3.30	2.78
1965	169.1	28.0	141.0	70.7	26.9	33.7	9.8	52.1	3.24	2.70
1966	185.2	27.4	157.8	80.9	30.3	36.2	10.4	55.3	3.35	2.85
1967	197.4	27.9	169.5	87.5	32.7	36.9	12.4	58.8	3.36	2.88
1968	211.8	29.1	182.6	94.0	34.6	40.7	13.3	64.8	3.27	2.82
1969	232.4	31.8	200.6	103.4	37.9	44.5	14.9	68.8	3.38	2.91
1970	240.3	31.1	209.2	105.8	41.7	45.8	16.0	72.4	3.32	2.89
1971	257.8	35.4	222.4	107.3	45.2	52.3	17.6	78.9	3.27	2.82
1972	285.6	44.3	241.3	113.6	50.0	57.7	19.9	87.7	3.26	2.75
1973	352.6	65.5	287.1	136.1	59.4	66.4	25.2	96.8	3.64	2.97
1974	423.3	62.4	360.9	177.0	75.6	74.6	33.7	104.6	4.05	3.45
1975	428.8	64.3	364.5	177.8	76.2	74.7	35.8	117.1	3.66	3.11
1976	463.3	60.2	403.1	194.9	86.1	82.7	39.4	128.5	3.60	3.14
1977	505.7	59.3	446.4	210.6	96.2	93.3	46.3	143.9	3.51	3.10
1978	588.2	73.7	514.5	238.4	113.8	107.8	54.5	165.1	3.56	3.12
1979	674.8	80.7	594.1	281.1	133.7	117.0	62.3	183.2	3.68	3.24
1980	739.3	84.5	654.8	310.7	154.8	122.7	66.7	201.1	3.68	3.26
1981	789.0	81.6	707.4	330.2	164.7	134.0	78.5	217.8	3.62	3.25
1982	771.5	79.2	692.2	316.1	162.2	134.7	79.2	229.5	3.36	3.02
1983	787.2	79.4	707.8	315.9	163.8	148.2	79.9	247.0	3.19	2.87
1984	854.5	81.2	773.3	342.5	178.0	166.6	86.1	268.9	3.18	2.88
1985	862.6	74.0	788.5	338.9	181.9	176.7	91.0	289.3	2.98	2.73
1986 [p]	856.3	71.0	785.3	328.1	184.0	183.1	90.1	302.5	2.83	2.60
1982: IV	771.5	79.2	692.2	316.1	162.2	134.7	79.2	229.5	3.36	3.02
1983: IV	787.2	79.4	707.8	315.9	163.8	148.2	79.9	247.0	3.19	2.87
1984: I	818.4	86.1	732.3	325.2	168.4	155.8	82.8	251.3	3.26	2.91
II	832.8	85.8	747.0	333.6	171.5	157.8	84.1	259.9	3.20	2.87
III	846.9	83.4	763.6	341.2	176.0	160.9	85.5	263.4	3.22	2.90
IV	854.5	81.2	773.3	342.5	178.0	166.6	86.1	268.9	3.18	2.88
1985: I	859.0	81.1	777.8	342.5	179.2	168.9	87.2	274.3	3.13	2.84
II	859.2	79.0	780.2	341.5	180.4	169.3	89.0	278.9	3.08	2.80
III	856.4	76.8	779.7	340.0	179.8	170.5	89.4	285.1	3.00	2.73
IV	862.6	74.0	788.5	338.9	181.9	176.7	91.0	289.3	2.98	2.73
1986: I	855.8	71.5	784.3	330.5	179.9	183.4	90.5	289.7	2.95	2.71
II	857.0	73.8	783.2	328.5	180.9	183.0	90.9	294.3	2.91	2.66
III	856.6	74.8	781.8	327.2	182.5	181.2	90.8	300.4	2.85	2.60
IV [p]	856.3	71.0	785.3	328.1	184.0	183.1	90.1	302.5	2.83	2.60

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[1] End of quarter.

[2] Beginning 1959, inventories of construction establishments are included in "other" nonfarm inventories. Prior to 1959, they are included in total and total nonfarm inventories, but not in the detailed categories shown.

[3] Quarterly totals at monthly rates. Business final sales equals final sales less gross product of households and institutions, government, and rest of the world, and includes a small amount of final sales by farms.

[4] Ratio based on total business final sales, which includes a small amount of final sales by farms.

Note.—The industry classification of inventories is on an establishment basis and is based on the 1972 Standard Industrial Classification (SIC) beginning 1948 and on the 1942 SIC prior to 1948.

Source: Department of Commerce, Bureau of Economic Analysis.

TABLE B-18.—*Inventories and final sales of business in 1982 dollars, 1947–86*

[Billions of 1982 dollars, except as noted; seasonally adjusted]

Quarter	Inventories [1]							Final sales [3]	Inventory-final sales ratio	
	Total [2]	Farm	Nonfarm						Total	Nonfarm [4]
			Total [2]	Manufacturing	Wholesale trade	Retail trade	Other			
Fourth quarter:										
1947	251.3	43.3	208.0	105.1	39.9	39.6	23.5	74.8	3.36	2.78
1948	263.5	45.4	218.1	108.6	42.7	43.7	23.1	77.1	3.42	2.83
1949	253.9	44.4	209.5	102.9	42.8	42.8	21.1	77.3	3.28	2.71
1950	278.1	47.7	230.4	109.8	47.6	49.5	23.4	82.6	3.37	2.79
1951	308.9	51.5	257.4	133.2	49.0	49.6	25.6	90.4	3.42	2.85
1952	318.9	54.6	264.3	139.0	50.0	49.6	25.8	93.9	3.40	2.81
1953	321.6	54.3	267.4	142.7	50.4	50.8	23.5	98.0	3.28	2.73
1954	316.9	55.9	260.9	135.0	51.1	51.2	23.6	97.7	3.24	2.67
1955	333.2	56.0	277.1	142.5	54.8	57.1	22.7	102.5	3.25	2.70
1956	346.1	53.7	292.4	153.2	56.6	57.8	24.8	104.7	3.31	2.79
1957	349.1	54.9	294.2	152.1	56.0	59.8	26.3	105.9	3.30	2.78
1958	345.7	57.3	288.4	146.8	56.0	59.4	26.3	107.7	3.21	2.68
1959	362.2	58.1	304.2	153.5	60.7	61.9	28.1	111.4	3.25	2.73
1960	370.0	59.4	310.5	154.7	61.8	65.2	28.8	114.1	3.24	2.72
1961	377.2	60.8	316.5	158.8	63.1	64.2	30.3	118.7	3.18	2.67
1962	393.4	63.5	329.9	167.2	65.0	67.5	30.1	123.4	3.19	2.67
1963	410.1	65.8	344.2	172.6	68.9	70.3	32.4	130.4	3.14	2.64
1964	425.8	64.0	361.8	180.9	72.6	73.4	34.9	136.3	3.12	2.65
1965	451.0	66.3	384.7	191.6	76.5	79.2	37.4	147.7	3.05	2.60
1966	487.9	66.1	421.7	213.6	85.1	84.3	38.7	150.2	3.25	2.81
1967	516.6	67.7	449.0	229.2	90.7	84.2	45.0	156.4	3.30	2.87
1968	537.7	68.2	469.4	239.0	93.5	90.5	46.5	163.7	3.28	2.87
1969	562.8	69.0	493.8	248.5	98.9	96.4	50.0	165.4	3.40	2.98
1970	571.1	69.8	501.2	248.3	105.8	96.6	50.5	166.8	3.42	3.00
1971	590.7	73.4	517.3	246.1	110.7	107.2	53.2	172.6	3.42	3.00
1972	612.4	75.9	536.6	251.7	114.0	114.0	56.9	185.4	3.30	2.89
1973	652.5	81.4	571.0	267.9	118.4	122.1	62.6	188.9	3.45	3.02
1974	685.7	81.3	604.5	288.5	128.4	121.1	66.4	184.3	3.72	3.28
1975	673.0	82.6	590.3	281.9	124.0	115.9	68.6	191.5	3.51	3.08
1976	695.1	79.1	616.1	294.0	131.2	122.3	68.5	199.3	3.49	3.09
1977	724.2	77.2	647.0	301.9	140.5	130.9	73.7	209.0	3.47	3.10
1978	761.0	77.8	683.2	314.1	151.6	139.1	78.4	221.5	3.44	3.08
1979	776.0	82.4	693.6	324.7	156.1	136.7	76.1	225.6	3.44	3.08
1980	769.1	77.8	691.4	326.8	161.6	130.4	72.7	225.3	3.41	3.07
1981	793.0	82.6	710.3	330.3	165.0	135.5	79.5	224.6	3.53	3.16
1982	768.4	81.2	687.2	315.2	161.5	132.9	77.6	226.1	3.40	3.04
1983	762.0	74.9	687.2	309.3	157.9	142.4	77.5	235.5	3.24	2.92
1984	821.2	79.8	741.4	329.9	171.3	157.6	82.6	247.7	3.32	2.99
1985	830.2	77.8	752.4	325.2	174.7	165.0	87.5	259.2	3.20	2.90
1986 ^{p}	841.0	77.7	763.3	322.3	180.1	168.9	91.9	266.4	3.16	2.87
1982: IV	768.4	81.2	687.2	315.2	161.5	132.9	77.6	226.1	3.40	3.04
1983: IV	762.0	74.9	687.2	309.3	157.9	142.4	77.5	235.5	3.24	2.92
1984: I	783.3	79.0	704.3	315.5	161.0	148.2	79.8	237.4	3.30	2.97
II	797.6	79.4	718.1	323.0	164.4	150.1	80.7	243.4	3.28	2.95
III	812.7	79.8	733.0	329.5	168.9	152.7	81.9	244.5	3.32	3.00
IV	821.2	79.8	741.4	329.9	171.3	157.6	82.6	247.7	3.32	2.99
1985: I	827.0	81.4	745.6	330.2	172.2	159.1	84.1	251.0	3.30	2.97
II	831.4	83.3	748.0	329.3	174.0	159.3	85.4	253.1	3.28	2.96
III	831.5	83.2	748.4	327.8	173.9	160.5	86.2	257.5	3.23	2.91
IV	830.2	77.8	752.4	325.2	174.7	165.0	87.5	259.2	3.20	2.90
1986: I	840.2	78.6	761.6	323.9	176.4	172.1	89.3	258.0	3.26	2.95
II	844.0	79.6	764.4	324.1	177.7	171.0	91.5	261.0	3.23	2.93
III	843.9	81.7	762.2	322.5	180.1	167.8	91.8	264.0	3.20	2.89
IV ^{p}	841.0	77.7	763.3	322.3	180.1	168.9	91.9	266.4	3.16	2.87

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[1] End of quarter.

[2] Beginning 1959, inventories of construction establishments are included in "other" nonfarm inventories. Prior to 1959, they are included in total and total nonfarm inventories, but not in the detailed categories shown.

[3] Quarterly totals at monthly rates. Business final sales equals final sales less gross product of households and institutions, government, and rest of world, and includes a small amount of final sales by farms.

[4] Ratio based on total business final sales, which includes a small amount of final sales by farms.

Note.—The industry classification of inventories is on an establishment basis and is based on the 1972 Standard Industrial Classification (SIC) beginning 1948 and on the 1942 SIC prior to 1948.

Source: Department of Commerce, Bureau of Economic Analysis.

TABLE B-19.—*Foreign transactions in the national income and product accounts, 1929–86*

[Billions of dollars; quarterly data at seasonally adjusted annual rates]

Year or quarter	Receipts from foreigners					Payments to foreigners								
	Total	Exports of goods and services			Capital grants received by the United States (net)	Total	Imports of goods and services			Transfer payments (net)			Interest paid by government to foreigners	Net foreign investment
		Total	Merchandise	Services			Total	Merchandise	Services	Total	From persons (net)	From government (net)		
1929	7.1	7.1	5.3	1.7	....	7.1	5.9	4.5	1.5	0.4	0.3	0.0	0.0	0.8
1933	2.4	2.4	1.7	.7	....	2.4	2.1	1.5	.6	.2	.2	.0	.0	.2
1939	4.6	4.6	3.3	1.3	....	4.6	3.4	2.4	1.0	.2	.2	.0	.0	1.0
1940	5.4	5.4	4.1	1.3	....	5.4	3.7	2.7	1.0	.2	.2	.0	.0	1.5
1941	6.1	6.1	4.5	1.6	....	6.1	4.7	3.4	1.3	.2	.2	.0	.0	1.3
1942	5.0	5.0	3.4	1.6	....	5.0	4.8	2.7	2.1	.2	.1	.1	.0	–.1
1943	4.6	4.6	2.9	1.7	....	4.6	6.5	3.4	3.1	.2	.2	–.1	.0	–2.1
1944	5.5	5.5	3.6	1.9	....	5.5	7.2	3.8	3.4	.3	.4	–.1	.0	–2.0
1945	7.4	7.4	5.4	2.1	....	7.4	7.9	3.9	4.0	.8	.5	.4	.0	–1.3
1946	15.2	15.2	11.8	3.4	....	15.2	7.3	5.1	2.3	2.9	.7	2.3	.0	4.9
1947	20.3	20.3	16.1	4.2	....	20.3	8.3	6.0	2.4	2.6	.7	2.0	.0	9.3
1948	17.5	17.5	13.3	4.3	....	17.5	10.6	7.6	3.0	4.5	.7	3.9	.0	2.4
1949	16.4	16.4	12.2	4.1	....	16.4	9.8	6.9	2.9	5.6	.5	5.1	.0	.9
1950	14.5	14.5	10.2	4.3	....	14.5	12.3	9.1	3.2	4.0	.4	3.6	.0	–1.8
1951	19.8	19.8	14.2	5.5	....	19.8	15.3	11.2	4.1	3.5	.4	3.1	.0	.9
1952	19.2	19.2	13.4	5.8	....	19.2	16.0	10.8	5.2	2.5	.4	2.1	.1	.6
1953	18.1	18.1	12.4	5.7	....	18.1	16.8	11.0	5.8	2.5	.5	2.0	.1	–1.3
1954	18.8	18.8	12.9	5.9	....	18.8	16.3	10.4	5.9	2.3	.5	1.8	.1	.2
1955	21.1	21.1	14.4	6.7	....	21.1	18.1	11.5	6.6	2.5	.4	2.1	.1	.4
1956	25.2	25.2	17.6	7.6	....	25.2	19.9	12.8	7.1	2.4	.5	1.9	.2	2.8
1957	28.2	28.2	19.6	8.7	....	28.2	20.9	13.3	7.6	2.3	.5	1.8	.2	4.8
1958	24.4	24.4	16.4	8.0	....	24.4	21.1	13.0	8.1	2.3	.4	1.8	.1	.9
1959	25.0	25.0	16.5	8.5	....	25.0	23.5	15.3	8.2	2.3	.4	1.9	.3	–1.2
1960	29.9	29.9	20.5	9.4	....	29.9	24.0	15.2	8.8	2.4	.4	1.9	.3	3.2
1961	31.1	31.1	20.9	10.1	....	31.1	23.9	15.1	8.8	2.7	.5	2.2	.3	4.2
1962	33.1	33.1	21.7	11.4	....	33.1	26.2	16.9	9.3	2.8	.5	2.3	.3	3.8
1963	35.7	35.7	23.3	12.3	....	35.7	27.5	17.7	9.7	2.9	.6	2.3	.4	4.9
1964	40.5	40.5	26.7	13.8	....	40.5	29.6	19.4	10.2	3.0	.7	2.3	.5	7.5
1965	42.9	42.9	27.8	15.1	....	42.9	33.2	22.2	11.0	3.0	.7	2.3	.5	6.2
1966	46.6	46.6	30.7	15.8	....	46.6	39.1	26.3	12.7	3.1	.7	2.4	.5	3.8
1967	49.5	49.5	32.2	17.3	....	49.5	42.1	27.8	14.4	3.3	.9	2.4	.6	3.5
1968	54.8	54.8	35.3	19.5	....	54.8	49.3	33.9	15.4	3.2	.9	2.3	.7	1.6
1969	60.4	60.4	38.3	22.1	....	60.4	54.7	36.8	17.9	3.2	1.0	2.2	.8	1.7
1970	69.8	68.9	44.5	24.4	0.9	69.8	60.5	40.9	19.6	3.5	1.2	2.3	1.0	4.8
1971	73.1	72.4	45.6	26.8	.7	73.1	66.1	46.6	19.5	3.9	1.2	2.7	1.8	1.3
1972	82.1	81.4	51.7	29.6	.7	82.1	78.2	56.9	21.3	4.1	1.1	2.9	2.7	–2.9
1973	114.1	114.1	73.9	40.2	0	114.1	97.3	71.8	25.5	4.1	1.3	2.9	3.8	6.8
1974	149.5	151.5	101.0	50.5	–2.0	149.5	135.2	104.5	30.7	4.6	1.0	3.6	4.3	5.4
1975	161.3	161.3	109.6	51.7	0	161.3	130.3	99.0	31.3	4.9	1.0	4.0	4.5	21.6
1976	177.7	177.7	117.5	60.2	0	177.7	158.9	124.3	34.6	5.4	1.0	4.4	4.5	9.0
1977	191.6	191.6	123.1	68.6	0	191.6	189.7	151.9	37.9	5.1	.9	4.2	5.5	–8.7
1978	227.5	227.5	144.7	82.8	0	227.5	223.4	176.5	46.9	5.6	.9	4.7	8.7	–10.1
1979	292.4	291.2	183.3	107.9	1.1	292.4	272.5	211.9	60.5	6.2	1.0	5.2	11.1	2.6
1980	352.1	351.0	225.1	125.9	1.2	352.1	318.9	247.5	71.4	7.7	1.1	6.5	12.6	13.0
1981	383.9	382.8	238.3	144.5	1.1	383.9	348.9	266.5	82.4	7.5	1.0	6.5	16.9	10.6
1982	361.9	361.9	214.0	148.0	0	361.9	335.6	249.5	86.1	9.0	1.3	7.8	18.3	–1.0
1983	352.5	352.5	206.1	146.4	0	352.5	358.7	271.3	87.3	9.5	1.0	8.5	17.8	–33.5
1984	382.7	382.7	224.1	158.6	0	382.7	441.4	334.4	107.0	12.2	1.5	10.7	19.8	–90.7
1985	369.8	369.8	219.6	150.2	0	369.8	448.6	341.7	106.9	15.0	1.6	13.4	21.3	–115.2
1986 ᵖ	373.0	373.0	220.4	152.6	0	373.0	478.7	369.8	108.9	15.0	1.4	13.7	23.0	–143.7
1982: IV	335.9	335.9	196.3	139.6	0	335.9	321.9	239.9	82.0	10.6	1.1	9.5	18.9	–15.4
1983: IV	364.7	364.7	215.6	149.1	0	364.7	390.5	298.3	92.2	13.4	1.2	12.2	18.3	–57.4
1984: I	373.4	373.4	219.3	154.1	0	373.4	419.0	320.2	98.8	9.5	1.4	8.1	18.6	–73.7
II	382.1	382.1	223.2	158.9	0	382.1	445.3	336.1	109.2	9.8	1.5	8.3	19.0	–92.1
III	389.2	389.2	226.0	163.2	0	389.2	449.1	338.5	110.6	12.5	1.4	11.1	20.2	–92.7
IV	386.2	386.2	228.0	158.1	0	386.2	452.2	342.9	109.4	17.0	1.5	15.5	21.2	–104.3
1985: I	378.4	378.4	226.0	152.4	0	378.4	427.9	323.1	104.8	13.2	2.1	11.1	21.2	–83.8
II	370.0	370.0	221.1	148.9	0	370.0	447.1	340.7	106.4	13.9	1.4	12.4	21.1	–112.0
III	362.3	362.3	215.0	147.4	0	362.3	446.0	339.2	106.8	16.0	1.5	14.5	21.5	–121.2
IV	368.2	368.2	216.2	152.0	0	368.2	473.6	363.8	109.8	17.0	1.6	15.4	21.5	–143.8
1986: I	374.8	374.8	219.7	155.2	0	374.8	468.5	358.9	109.6	12.2	1.7	10.5	22.8	–128.6
II	363.0	363.0	212.5	150.6	0	363.0	467.5	358.9	108.7	16.3	1.2	15.0	22.2	–143.0
III	370.8	370.8	219.2	151.6	0	370.8	479.7	372.7	106.9	16.6	1.2	15.5	22.8	–148.3
IV ᵖ	383.4	383.4	230.3	153.1	0	383.4	499.0	388.6	110.3	15.2	1.5	13.6	24.0	–154.8

Source: Department of Commerce, Bureau of Economic Analysis.

TABLE B-20.—*Exports and imports of goods and services in 1982 dollars, 1929–86*

[Billions of 1982 dollars; quarterly data at seasonally adjusted annual rates]

Year or quarter	Exports of goods and services							Imports of goods and services						
	Total	Merchandise			Services			Total	Merchandise			Services		
		Total	Durable goods	Nondurable goods	Total	Factor income [1]	Other		Total	Durable goods	Nondurable goods	Total	Factor income [1]	Other
1929	42.1	29.7	12.3	17.5	12.3	7.6	4.8	37.4	29.3	7.4	22.0	8.0	2.6	5.4
1933	22.7	15.9	4.5	11.4	6.8	3.7	3.1	24.2	19.2	4.0	15.2	4.9	1.3	3.6
1939	36.2	26.5	13.3	13.1	9.8	5.2	4.5	30.1	24.0	6.9	17.0	6.1	2.2	4.0
1940	40.0	30.5	18.9	11.6	9.4	4.6	4.8	31.7	25.6	8.8	16.8	6.2	2.0	4.1
1941	42.0	31.7	20.2	11.6	10.3	5.2	5.1	38.2	29.4	11.0	18.4	8.8	1.9	6.9
1942	29.1	19.5	13.4	6.1	9.6	4.8	4.9	36.9	21.0	6.7	14.3	15.8	1.7	14.2
1943	25.1	15.2	10.5	4.8	9.8	4.6	5.2	48.0	25.0	6.5	18.5	23.0	1.9	21.2
1944	27.3	16.4	11.0	5.4	10.9	4.9	6.0	51.1	26.5	6.7	19.7	24.6	2.1	22.5
1945	35.2	24.0	12.6	11.3	11.2	4.8	6.5	54.1	26.0	6.9	19.1	28.2	2.5	25.7
1946	69.0	54.1	23.1	31.0	14.9	5.6	9.4	42.0	30.0	7.8	22.2	12.0	1.9	10.1
1947	82.3	65.5	34.4	31.1	16.9	7.2	9.7	39.9	29.3	7.8	21.5	10.6	2.1	8.5
1948	66.2	49.1	24.5	24.6	17.1	8.5	8.6	47.1	33.9	9.4	24.5	13.1	2.3	10.8
1949	65.0	48.4	24.1	24.2	16.7	8.2	8.5	46.2	33.3	8.9	24.4	13.0	2.6	10.4
1950	59.2	42.2	21.0	21.3	17.0	9.1	7.9	54.6	40.9	11.5	29.5	13.6	2.8	10.8
1951	72.0	51.1	23.8	27.3	20.9	10.9	10.0	57.4	40.4	11.5	28.9	17.1	3.1	14.0
1952	70.1	49.0	25.3	23.7	21.2	11.3	9.9	63.3	41.9	13.0	28.9	21.4	2.9	18.4
1953	66.9	46.4	25.8	20.6	20.5	11.0	9.5	69.7	44.6	13.7	30.9	25.1	3.1	21.9
1954	70.0	48.8	26.9	21.9	21.2	11.6	9.6	67.5	42.1	11.9	30.3	25.4	3.3	22.1
1955	76.9	53.2	30.3	22.9	23.7	13.0	10.7	76.9	48.3	14.7	33.5	28.6	3.6	25.0
1956	87.9	61.8	34.4	27.4	26.1	14.1	12.0	83.6	53.6	16.8	36.8	30.0	3.4	26.6
1957	94.9	66.6	37.2	29.4	28.3	14.8	13.5	87.9	56.1	17.1	39.0	31.8	3.4	28.4
1958	82.4	56.6	31.0	25.6	25.8	13.2	12.6	92.8	58.1	16.9	41.3	34.6	3.7	30.9
1959	83.7	56.1	30.5	25.6	27.6	14.0	13.5	101.9	68.0	22.8	45.3	33.8	4.0	29.8
1960	98.4	68.8	37.9	30.9	29.6	15.7	13.9	102.4	67.5	21.7	45.8	34.9	4.6	30.3
1961	100.7	69.1	38.0	31.1	31.6	16.9	14.7	103.3	69.0	21.1	47.9	34.3	4.8	29.6
1962	106.9	72.2	39.8	32.4	34.7	18.5	16.2	114.4	78.9	24.8	54.0	35.5	4.6	30.9
1963	114.7	77.6	42.1	35.5	37.1	20.0	17.2	116.6	81.2	26.2	55.0	35.4	5.1	30.3
1964	128.8	87.7	48.2	39.5	41.1	21.8	19.3	122.8	86.3	29.0	57.4	36.5	5.6	30.9
1965	132.0	88.2	50.0	38.2	43.8	23.2	20.6	134.7	97.0	35.6	61.4	37.7	6.2	31.6
1966	138.4	94.0	53.6	40.4	44.4	22.8	21.6	152.1	109.1	44.0	65.2	43.0	7.0	36.0
1967	143.6	96.5	58.8	37.7	47.1	23.8	23.3	160.5	113.0	48.0	65.0	47.5	7.5	40.0
1968	155.7	104.9	64.8	40.1	50.8	26.3	24.5	185.3	135.7	61.7	74.0	49.6	8.6	41.0
1969	165.0	110.0	69.5	40.5	55.0	29.0	26.0	199.9	144.6	65.6	79.0	55.2	12.0	43.2
1970	178.3	120.6	74.3	46.3	57.6	29.6	28.0	208.3	150.9	66.8	84.1	57.4	12.5	45.0
1971	179.2	119.3	72.9	46.4	59.9	30.5	29.4	218.9	166.2	74.4	91.8	52.7	9.8	42.9
1972	195.2	131.3	80.0	51.3	64.0	33.9	30.1	244.6	190.7	84.4	106.4	53.9	10.2	43.7
1973	242.3	160.6	99.3	61.3	81.7	46.2	35.4	273.8	218.2	88.9	129.4	55.6	13.9	41.7
1974	269.1	175.8	113.9	62.0	93.3	53.5	39.8	268.4	211.8	89.2	122.5	56.6	17.7	38.9
1975	259.7	171.5	112.1	59.5	88.2	45.6	42.6	240.8	187.9	72.4	115.5	52.9	16.3	36.6
1976	274.4	177.5	112.9	64.7	96.8	49.7	47.1	285.4	229.3	88.5	140.8	56.1	16.7	39.3
1977	281.6	178.1	111.2	66.9	103.6	53.5	50.1	317.1	259.4	99.3	160.1	57.7	16.1	41.6
1978	312.6	196.2	121.9	74.3	116.4	63.2	53.2	339.4	274.1	113.7	160.4	65.3	21.1	44.2
1979	356.8	218.2	136.6	81.6	138.6	86.6	52.0	353.2	277.9	115.7	162.2	75.3	30.8	44.5
1980	388.9	241.8	150.0	91.9	147.1	91.4	55.7	332.0	253.6	116.1	137.5	78.4	35.9	42.4
1981	392.7	238.5	143.8	94.6	154.3	96.3	57.9	343.4	258.7	126.1	132.6	84.7	41.1	43.6
1982	361.9	214.0	121.9	92.1	148.0	91.6	56.3	335.6	249.5	125.3	124.2	86.1	40.5	45.7
1983	348.1	207.6	117.5	90.1	140.5	85.0	55.5	368.1	282.2	149.2	133.0	85.8	37.1	48.7
1984	369.7	222.7	127.3	95.4	147.0	92.6	54.4	453.2	350.0	199.3	150.7	103.3	48.7	54.6
1985	362.3	227.4	133.5	93.9	135.0	80.9	54.0	470.5	368.7	216.6	152.1	101.8	44.0	57.8
1986 *p*	371.3	237.5	146.9	90.7	133.8	76.9	56.9	521.0	420.4	246.8	173.6	100.7	44.2	56.5
1982: IV	336.0	199.1	110.8	88.3	136.9	83.0	53.8	324.3	242.7	117.1	125.6	81.6	35.1	46.5
1983: IV	355.5	214.4	123.7	90.7	141.1	88.2	52.9	401.6	311.6	171.3	140.3	90.1	39.7	50.3
1984: I	361.3	216.9	124.0	92.9	144.4	90.0	54.4	429.9	334.0	186.7	147.3	95.8	44.3	51.5
II	367.0	219.1	125.0	94.1	147.9	94.0	53.9	454.2	348.7	197.3	151.4	105.5	51.3	54.2
III	375.5	224.9	128.3	96.6	150.6	96.2	54.4	461.2	354.8	204.5	150.3	106.4	51.6	54.8
IV	375.0	230.1	132.1	98.1	144.9	90.1	54.8	467.7	362.5	208.6	153.9	105.3	47.3	58.0
1985: I	369.4	230.8	132.6	98.2	138.5	82.6	56.0	448.2	347.5	209.2	138.3	100.7	44.1	56.6
II	361.2	227.0	134.3	92.7	134.2	81.2	53.0	469.3	367.7	213.8	153.9	101.7	44.1	57.5
III	355.8	223.9	133.6	90.3	132.0	79.1	52.9	469.6	368.4	216.9	151.4	101.3	44.0	57.2
IV	362.9	227.8	133.4	94.4	135.1	80.9	54.3	494.8	391.3	226.7	164.6	103.6	43.7	59.8
1986: I	369.2	232.0	142.1	89.9	137.2	82.4	54.8	495.1	392.6	237.4	155.2	102.5	44.3	58.2
II	359.8	227.2	142.7	84.5	132.6	76.3	56.3	513.6	412.8	244.8	168.0	100.8	45.5	55.3
III	371.2	238.8	148.0	90.8	132.4	74.8	57.6	534.5	436.0	249.5	186.4	98.5	42.2	56.4
IV *p*	385.3	252.2	154.7	97.5	133.1	74.0	59.0	540.8	440.0	255.4	184.6	100.8	44.7	56.1

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[1] Factor income exports less factor income imports equals rest-of-the-world product.

Source: Department of Commerce, Bureau of Economic Analysis.

TABLE B–21.—*Relation of gross national product, net national product, and national income, 1929–86*

[Billions of dollars; quarterly data at seasonally adjusted annual rates]

Year or quarter	Gross national product	Less: Capital consumption allowances with capital consumption adjustment	Equals: Net national product	Less:			Plus: Subsidies less current surplus of government enterprises	Equals: National income
				Indirect business tax and nontax liability	Business transfer payments	Statistical discrepancy		
1929	103.9	9.9	94.0	7.1	0.6	1.5	−0.2	84.7
1933	56.0	7.6	48.4	7.1	.7	1.2	.0	39.4
1939	91.3	9.0	82.3	9.4	.5	1.7	.4	71.2
1940	100.4	9.4	91.1	10.1	.4	1.4	.4	79.6
1941	125.5	10.3	115.3	11.3	.5	.7	.1	102.8
1942	159.0	11.3	147.7	11.8	.5	−.7	.1	136.2
1943	192.7	11.6	181.1	12.8	.5	−1.7	.1	169.7
1944	211.4	12.0	199.4	14.2	.5	2.7	.6	182.6
1945	213.4	12.4	201.0	15.5	.5	4.0	.7	181.6
1946	212.4	14.2	198.2	17.1	.5	.7	.9	180.7
1947	235.2	17.6	217.6	18.4	.6	1.8	−.2	196.6
1948	261.6	20.4	241.2	20.1	.7	−1.3	−.[illegible]	221.5
1949	260.4	22.0	238.4	21.3	.8	.8	−.3	215.2
1950	288.3	23.6	264.6	23.4	.8	.8	.1	239.8
1951	333.4	27.2	306.2	25.3	.9	2.7	−.1	277.3
1952	351.6	29.2	322.5	27.7	1.0	1.8	−.3	291.6
1953	371.6	30.9	340.7	29.7	1.2	2.6	−.5	306.6
1954	372.5	32.5	340.0	29.6	1.1	2.7	−.3	306.3
1955	405.9	34.4	371.5	32.2	1.2	1.8	.0	336.3
1956	428.2	38.1	390.1	35.0	1.4	−1.9	.7	356.3
1957	451.0	41.1	409.9	37.4	1.5	−1.2	.7	372.8
1958	456.8	42.8	414.0	38.6	1.6	−.1	1.1	375.0
1959	495.8	44.6	451.2	41.7	1.8	−1.5	.1	409.2
1960	515.3	46.4	468.9	45.3	2.0	−2.8	.4	424.9
1961	533.8	47.8	486.1	48.0	2.0	−1.2	1.7	439.0
1962	574.6	49.4	525.2	51.5	2.1	.0	1.8	473.3
1963	606.9	51.4	555.5	54.6	2.4	−.6	1.1	500.3
1964	649.8	53.9	595.9	58.7	2.7	−1.4	1.7	537.6
1965	705.1	57.4	647.7	62.5	2.8	−1.2	1.6	585.2
1966	772.0	62.1	709.9	65.2	3.0	2.1	2.5	642.0
1967	816.4	67.4	749.0	70.1	3.1	−.4	1.6	677.7
1968	892.7	73.9	818.7	78.7	3.4	−1.1	1.4	739.1
1969	963.9	81.4	882.5	86.3	3.9	−3.9	1.9	798.1
1970	1,015.5	88.8	926.6	94.0	4.1	−1.1	2.9	832.6
1971	1,102.7	97.5	1,005.1	103.4	4.4	1.8	2.6	898.1
1972	1,212.8	107.9	1,104.8	111.1	4.9	−1.6	3.7	994.1
1973	1,359.3	118.1	1,241.2	120.8	5.5	−4.3	3.5	1,122.7
1974	1,472.8	137.5	1,335.4	129.0	5.8	−1.7	1.2	1,203.5
1975	1,598.4	161.8	1,436.6	140.0	7.4	2.5	2.4	1,289.1
1976	1,782.8	179.2	1,603.6	151.7	7.9	3.6	1.0	1,441.4
1977	1,990.5	201.5	1,789.0	165.7	8.6	.0	3.0	1,617.8
1978	2,249.7	229.9	2,019.8	178.1	9.3	−1.9	3.9	1,838.2
1979	2,508.2	265.8	2,242.4	189.4	10.3	−1.0	3.5	2,047.3
1980	2,732.0	303.8	2,428.1	213.3	12.1	4.9	5.7	2,203.5
1981	3,052.6	347.8	2,704.8	251.5	12.4	4.1	6.7	2,443.5
1982	3,166.0	383.2	2,782.8	258.8	14.3	−.1	8.7	2,518.4
1983	3,405.7	396.6	3,009.1	282.6	16.0	5.2	14.1	2,719.5
1984	3,765.0	415.1	3,349.9	312.0	18.3	−1.9	10.5	3,032.0
1985	3,998.1	437.2	3,560.9	331.4	20.9	−5.5	8.2	3,222.3
1986 ᵖ	4,208.5	455.1	3,753.4	348.7	23.2	5.4	11.3	3,387.4
1982: IV	3,212.5	393.2	2,819.3	264.5	15.2	6.8	15.4	2,548.2
1983: IV	3,545.8	400.8	3,145.0	294.1	16.5	2.5	19.6	2,851.5
1984: I	3,670.9	405.5	3,265.4	302.9	17.2	5.0	23.0	2,963.2
II	3,743.8	413.0	3,330.7	310.3	17.9	−3.2	4.5	3,010.3
III	3,799.7	418.5	3,381.2	315.3	18.7	−.6	4.5	3,052.3
IV	3,845.6	423.3	3,422.3	319.6	19.4	−8.6	10.0	3,102.0
1985: I	3,909.3	427.8	3,481.5	323.3	20.0	−6.4	12.5	3,157.0
II	3,965.0	433.1	3,531.9	331.9	20.6	−11.0	10.2	3,201.4
III	4,030.5	441.3	3,589.3	332.7	21.2	−5.5	2.6	3,243.4
IV	4,087.7	446.7	3,641.0	337.7	21.7	1.6	7.4	3,287.3
1986: I	4,149.2	447.1	3,702.1	346.7	22.3	−3.6	4.1	3,340.7
II	4,175.6	453.3	3,722.3	340.8	22.9	4.6	22.4	3,376.4
III	4,240.7	457.6	3,783.1	354.2	23.5	10.3	1.0	3,396.1
IV ᵖ	4,268.4	462.5	3,806.0	353.1	24.1	…………	17.8	…………

Source: Department of Commerce, Bureau of Economic Analysis.

Table B–22.—*Relation of national income and personal income, 1929–86*

[Billions of dollars; quarterly data at seasonally adjusted annual rates]

Year or quarter	National income	Less:				Plus:				Equals:
		Corporate profits with inventory valuation and capital consumption adjustments	Net interest	Contributions for social insurance	Wage accruals less disbursements	Government transfer payments to persons	Personal interest income	Personal dividend income	Business transfer payments	Personal income
1929	84.7	9.6	4.7	0.3	0.0	0.9	6.9	5.8	0.6	84.3
1933	39.4	−1.5	4.1	.3	.0	1.5	5.5	2.0	.7	46.3
1939	71.2	5.5	3.6	2.2	.0	2.5	5.3	3.8	.5	72.1
1940	79.6	8.8	3.3	2.4	.0	2.7	5.3	4.0	.4	77.6
1941	102.8	14.3	3.3	2.8	.0	2.6	5.3	4.4	.5	95.2
1942	136.2	19.7	3.1	3.5	.0	2.7	5.2	4.3	.5	122.4
1943	169.7	24.0	2.7	4.6	.2	2.5	5.1	4.4	.5	150.7
1944	182.6	24.2	2.3	5.2	−.2	3.1	5.2	4.6	.5	164.5
1945	181.6	19.7	2.2	6.3	.0	5.6	5.8	4.6	.5	170.0
1946	180.7	17.2	1.8	7.7	.0	10.8	6.6	5.6	.5	177.6
1947	196.6	22.9	2.3	6.7	.0	11.2	7.5	6.3	.6	190.2
1948	221.5	30.3	2.4	6.0	.0	10.6	8.0	7.0	.7	209.2
1949	215.2	28.0	2.6	6.6	.0	11.7	8.7	7.2	.8	206.4
1950	239.8	34.9	3.0	7.4	.0	14.4	9.6	8.8	.8	228.1
1951	277.3	39.9	3.5	8.8	.1	11.6	10.4	8.5	.9	256.5
1952	291.6	37.5	3.9	9.3	.0	12.2	11.2	8.5	1.0	273.8
1953	306.6	37.7	4.4	9.6	−.1	13.1	12.4	8.8	1.2	290.5
1954	306.3	36.6	5.2	10.6	.0	15.3	13.7	9.1	1.1	293.0
1955	336.3	47.1	5.8	12.0	.0	16.4	14.9	10.3	1.2	314.2
1956	356.3	45.7	6.5	13.5	.0	17.5	16.6	11.1	1.4	337.2
1957	372.8	45.3	7.8	15.5	.0	20.3	18.7	11.5	1.5	356.3
1958	375.0	40.3	9.5	15.9	.0	24.7	20.3	11.3	1.6	367.1
1959	409.2	51.4	10.2	18.8	.0	25.7	22.3	12.2	1.8	390.7
1960	424.9	49.5	11.3	21.9	.0	27.5	24.9	12.9	2.0	409.4
1961	439.0	50.3	12.9	22.9	.0	31.5	26.3	13.3	2.0	426.0
1962	473.3	58.3	14.6	25.4	.0	32.6	28.9	14.4	2.1	453.2
1963	500.3	63.6	16.3	28.5	.0	34.5	32.2	15.5	2.4	476.3
1964	537.6	70.7	18.2	30.1	.0	36.0	35.5	17.3	2.7	510.2
1965	585.2	81.3	20.9	31.6	.0	39.1	39.6	19.1	2.8	552.0
1966	642.0	86.6	24.3	40.6	.0	43.6	44.2	19.4	3.0	600.8
1967	677.7	84.1	27.4	45.5	.0	52.3	48.2	20.2	3.1	644.5
1968	739.1	90.7	29.8	50.4	.0	60.6	53.2	21.9	3.4	707.2
1969	798.1	87.4	34.6	57.9	.0	67.5	60.9	22.4	3.9	772.9
1970	832.6	74.7	41.2	62.2	.0	81.8	69.3	22.2	4.1	831.8
1971	898.1	87.1	46.3	68.9	.6	97.0	74.7	22.6	4.4	894.0
1972	994.1	100.7	51.0	79.0	.0	108.4	80.8	24.1	4.9	981.6
1973	1,122.7	113.3	59.6	97.6	−.1	124.1	93.3	26.6	5.5	1,101.7
1974	1,203.5	101.7	75.5	110.5	−.5	147.4	111.9	28.9	5.8	1,210.1
1975	1,289.1	117.6	83.8	118.5	.1	185.7	122.5	28.7	7.4	1,313.4
1976	1,441.4	145.2	88.8	134.5	.1	202.8	134.1	33.8	7.9	1,451.4
1977	1,617.8	174.8	105.3	149.8	.1	217.5	155.4	38.2	8.6	1,607.5
1978	1,838.2	197.2	126.3	171.7	.3	234.8	182.5	43.0	9.3	1,812.4
1979	2,047.3	200.1	158.3	197.8	−.2	262.8	221.5	48.1	10.3	2,034.0
1980	2,203.5	177.2	200.9	216.5	.0	312.6	271.9	52.9	12.1	2,258.5
1981	2,443.5	188.0	248.1	251.2	.1	355.7	335.4	61.3	12.4	2,520.9
1982	2,518.4	150.0	272.3	269.6	.0	396.2	369.7	63.9	14.3	2,670.8
1983	2,719.5	213.7	281.0	291.0	−.4	426.6	393.1	68.7	16.0	2,838.6
1984	3,032.0	264.7	307.4	326.7	.2	437.3	446.9	74.7	18.3	3,110.2
1985	3,222.3	280.7	311.4	355.7	−.2	466.2	476.2	76.4	20.9	3,314.5
1986 [p]	3,387.4	299.7	294.9	376.1	.0	490.5	475.4	81.2	23.2	3,487.0
1982: IV	2,548.2	146.1	266.9	273.0	.0	420.2	366.2	65.4	15.2	2,729.2
1983: IV	2,851.5	248.5	290.2	299.2	.0	429.0	411.6	71.0	16.5	2,941.8
1984: I	2,963.2	262.5	292.5	318.8	.2	433.4	421.4	72.9	17.2	3,034.2
II	3,010.3	271.7	305.2	323.9	.2	436.7	438.9	74.7	17.9	3,077.4
III	3,052.3	259.8	316.1	329.0	.0	437.7	460.6	75.2	18.7	3,139.7
IV	3,102.0	265.0	315.7	334.9	.6	441.6	466.8	75.9	19.4	3,189.6
1985: I	3,157.0	266.4	316.8	350.0	.1	459.4	473.8	76.3	20.0	3,253.1
II	3,201.4	274.3	311.4	353.9	−1.0	463.5	475.3	76.4	20.6	3,298.7
III	3,243.4	296.3	309.7	356.8	.0	469.9	475.2	76.3	21.2	3,323.2
IV	3,287.3	285.6	307.6	362.1	.0	471.8	480.6	76.7	21.7	3,382.9
1986: I	3,340.7	296.4	304.9	371.5	.0	482.4	480.8	79.1	22.3	3,432.6
II	3,376.4	293.1	297.7	373.5	.0	487.2	480.1	81.1	22.9	3,483.3
III	3,396.1	302.0	292.9	376.6	.0	495.0	473.8	82.0	23.5	3,498.8
IV [p]			284.1	382.6	.0	497.6	466.7	82.7	24.1	3,533.4

Source: Department of Commerce, Bureau of Economic Analysis.

Table B-23.—*National income by type of income, 1929–86*

[Billions of dollars; quarterly data at seasonally adjusted annual rates]

Year or quarter	National income [1]	Compensation of employees			Proprietors' income with inventory valuation and capital consumption adjustments							
						Farm			Nonfarm			
		Total	Wages and salaries	Supplements to wages and salaries [2]	Total	Total	Proprietors' income [3]	Capital consumption adjustment	Total	Proprietors' income [4]	Inventory valuation adjustment	Capital consumption adjustment
1929	84.7	51.1	50.5	0.7	14.4	6.1	6.3	−0.2	8.3	8.8	0.1	−0.6
1933	39.4	29.6	29.0	.6	5.4	2.5	2.5	.0	2.9	3.9	−.5	−.5
1939	71.2	48.2	46.0	2.2	11.4	4.4	4.5	−.1	7.1	7.6	−.2	−.4
1940	79.6	52.2	49.9	2.3	12.6	4.4	4.5	−.1	8.2	8.6	.0	−.3
1941	102.8	64.8	62.1	2.8	17.1	6.4	6.5	−.2	10.8	11.7	−.6	−.3
1942	136.2	85.3	82.1	3.2	23.9	10.1	10.3	−.2	13.8	14.4	−.4	−.3
1943	169.7	109.6	105.8	3.8	28.8	12.0	12.2	−.2	16.8	17.1	−.2	−.2
1944	182.6	121.3	116.7	4.5	30.0	11.9	12.2	−.3	18.1	18.3	−.1	−.1
1945	181.6	123.3	117.5	5.8	31.5	12.4	12.6	−.3	19.1	19.3	−.1	−.1
1946	180.7	119.6	112.0	7.6	36.3	14.8	15.2	−.4	21.5	23.3	−1.7	−.1
1947	196.6	130.1	123.1	7.0	35.5	15.1	15.6	−.5	20.4	21.8	−1.5	.1
1948	221.5	142.1	135.5	6.5	40.4	17.5	18.2	−.7	22.9	23.1	−.4	.2
1949	215.2	142.0	134.7	7.3	35.9	12.8	13.5	−.7	23.1	22.2	.5	.5
1950	239.8	155.4	147.2	8.2	38.8	13.6	14.3	−.7	25.2	25.7	−1.1	.6
1951	277.3	181.6	171.6	10.0	44.0	16.0	16.8	−.8	28.0	27.7	−.3	.6
1952	291.6	196.3	185.6	10.7	44.4	15.0	15.9	−.9	29.4	28.5	.2	.7
1953	306.6	210.4	199.0	11.5	43.4	13.0	13.9	−.9	30.4	29.8	−.2	.7
1954	306.3	209.4	197.2	12.1	43.5	12.4	13.2	−.8	31.1	30.4	.0	.8
1955	336.3	225.9	212.1	13.8	45.4	11.3	12.1	−.8	34.0	33.5	−.2	.7
1956	356.3	244.7	229.0	15.7	46.9	11.1	12.0	−.9	35.8	35.4	−.5	.9
1957	372.8	257.8	239.9	17.8	48.8	11.0	11.9	−.9	37.8	37.2	−.3	.9
1958	375.0	259.8	241.3	18.5	51.5	13.1	14.0	−.9	38.5	37.7	−.1	.9
1959	409.2	281.2	259.8	21.4	51.7	10.8	11.7	−.9	40.9	40.1	.0	.9
1960	424.9	296.7	272.8	23.8	52.1	11.6	12.4	−.8	40.5	39.7	.0	.8
1961	439.0	305.6	280.5	25.1	54.3	12.0	12.8	−.8	42.3	41.7	.0	.6
1962	473.3	327.4	299.3	28.1	56.6	12.1	12.9	−.8	44.4	43.8	.0	.6
1963	500.3	345.5	314.8	30.7	57.7	11.9	12.6	−.7	45.7	45.1	.0	.7
1964	537.6	371.0	337.7	33.2	60.5	10.7	11.4	−.7	49.8	49.1	−.1	.7
1965	585.2	399.8	363.7	36.1	65.1	13.0	13.7	−.7	52.1	51.8	−.2	.4
1966	642.0	443.0	400.3	42.7	69.6	14.0	14.8	−.8	55.5	55.5	−.2	.3
1967	677.7	475.5	428.9	46.6	71.1	12.7	13.6	−.8	58.4	58.4	−.2	.2
1968	739.1	524.7	471.9	52.8	75.4	12.8	13.7	−.9	62.6	63.1	−.4	−.1
1969	798.1	578.4	518.3	60.1	79.3	14.6	15.8	−1.1	64.7	65.1	−.5	.1
1970	832.6	618.3	551.5	66.8	80.2	14.7	16.0	−1.3	65.4	66.0	−.5	.0
1971	898.1	659.4	584.5	74.9	86.8	15.5	16.8	−1.3	71.4	72.3	−.6	−.3
1972	994.1	726.2	638.7	87.6	98.3	19.4	21.1	−1.7	79.0	79.6	−.7	.1
1973	1,122.7	812.8	708.6	104.2	119.0	33.7	35.6	−1.9	85.3	87.2	−2.0	.1
1974	1,203.5	891.3	772.2	119.1	118.8	27.5	30.1	−2.6	91.3	95.3	−3.8	−.3
1975	1,289.1	948.7	814.7	134.0	125.4	25.4	29.0	−3.6	100.0	102.2	−1.2	−1.0
1976	1,441.4	1,057.9	899.6	158.3	137.7	20.6	24.6	−4.0	117.1	119.6	−1.3	−1.3
1977	1,617.8	1,176.6	994.0	182.6	152.9	20.5	25.1	−4.6	132.4	135.1	−1.3	−1.4
1978	1,838.2	1,329.2	1,119.6	209.7	176.2	27.0	32.4	−5.3	149.2	152.8	−2.3	−1.4
1979	2,047.3	1,491.4	1,251.9	239.5	191.9	31.7	38.0	−6.3	160.1	164.0	−2.9	−1.0
1980	2,203.5	1,638.2	1,372.0	266.3	180.7	20.5	28.1	−7.6	160.1	164.3	−2.9	−1.2
1981	2,443.5	1,807.4	1,510.4	297.1	186.8	30.7	39.4	−8.7	156.1	155.2	−1.4	2.3
1982	2,518.4	1,907.0	1,586.1	320.9	175.5	24.6	33.9	−9.3	150.9	148.5	−.5	2.9
1983	2,719.5	2,020.7	1,676.2	344.5	190.9	12.4	21.8	−9.4	178.4	167.3	−.8	12.0
1984	3,032.0	2,214.7	1,837.0	377.7	236.9	31.5	40.8	−9.3	205.3	183.9	−.4	21.8
1985	3,222.3	2,368.2	1,965.8	402.4	254.4	29.2	38.0	−8.8	225.2	193.5	−.2	31.9
1986 ᵖ	3,387.4	2,498.3	2,073.8	424.5	278.9	26.4	34.6	−8.2	252.5	217.5	−.9	35.9
1982: IV	2,548.2	1,931.1	1,603.7	327.4	188.3	28.5	38.0	−9.4	159.8	156.9	−.6	3.5
1983: IV	2,851.5	2,092.7	1,739.4	353.4	207.8	19.3	28.5	−9.3	188.6	172.7	−.7	16.5
1984: I	2,963.2	2,153.7	1,784.1	369.6	242.5	44.5	53.7	−9.2	198.0	180.4	−.9	18.5
II	3,010.3	2,195.4	1,820.5	374.9	229.6	26.4	35.8	−9.4	203.2	183.5	−.6	20.3
III	3,052.3	2,234.7	1,854.8	379.8	234.6	24.7	34.1	−9.4	209.9	187.4	−.2	22.8
IV	3,102.0	2,275.0	1,888.6	386.3	240.7	30.4	39.5	−9.1	210.3	184.4	.1	25.8
1985: I	3,157.0	2,316.3	1,922.4	393.9	250.7	32.9	41.8	−8.9	217.8	189.0	−.3	29.0
II	3,201.4	2,352.1	1,952.2	399.8	255.5	33.0	41.9	−8.8	222.5	191.2	−.3	31.5
III	3,243.4	2,380.9	1,976.0	404.9	249.3	21.6	30.3	−8.7	227.7	194.4	.1	33.2
IV	3,287.3	2,423.6	2,012.8	410.9	262.1	29.4	37.9	−8.5	232.7	199.1	−.3	34.0
1986: I	3,340.7	2,461.5	2,044.1	417.4	265.3	24.4	32.7	−8.4	240.9	206.6	−.4	34.7
II	3,376.4	2,480.2	2,058.8	421.3	289.1	39.5	47.9	−8.3	249.6	215.5	−1.0	35.1
III	3,396.1	2,507.4	2,081.1	426.3	277.5	19.6	27.7	−8.2	258.0	222.8	−1.1	36.2
IV ᵖ	…………	2,544.2	2,111.1	433.1	283.7	22.2	30.1	−8.0	261.6	224.9	−1.0	37.7

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[1] National income is the total net income earned in production. It differs from gross national product mainly in that it excludes depreciation charges and other allowances for business and institutional consumption of durable capital goods and indirect business taxes. See Table B-21.

[2] Employer contributions for social insurance and to private pension, health, and welfare funds.

See next page for continuation of table.

TABLE B-23.—*National income by type of income, 1929–86*—Continued

[Billions of dollars; quarterly data at seasonally adjusted annual rates]

Year or quarter	Rental income of persons with capital consumption adjustment			Corporate profits with inventory valuation and capital consumption adjustments									Net interest
	Total	Rental income of persons	Capital consumption adjustment	Total	Profits with inventory valuation adjustment and without capital consumption adjustment							Capital consumption adjustment	
					Total	Profits					Inventory valuation adjustment		
						Profits before tax	Profits tax liability	Profits after tax					
								Total	Dividends	Undistributed profits			
1929	4.9	5.6	−0.7	9.6	10.5	10.0	1.4	8.6	5.8	2.8	0.5	−0.9	4.7
1933	2.0	2.1	−.1	−1.5	−1.2	1.0	.5	.4	2.0	−1.6	−2.1	−.3	4.1
1939	2.6	3.2	−.5	5.5	6.5	7.2	1.4	5.7	3.8	2.0	−.7	−1.0	3.6
1940	2.7	3.3	−.6	8.8	9.8	10.0	2.8	7.2	4.0	3.2	−.2	−1.1	3.3
1941	3.2	4.0	−.8	14.3	15.4	17.9	7.6	10.3	4.4	5.8	−2.5	−1.1	3.3
1942	4.1	5.1	−.9	19.7	20.5	21.7	11.4	10.3	4.3	6.0	−1.2	−.8	3.1
1943	4.6	5.7	−1.1	24.0	24.5	25.3	14.1	11.2	4.4	6.7	−.8	−.5	2.7
1944	4.8	6.1	−1.3	24.2	24.0	24.2	12.9	11.3	4.6	6.7	−.3	.2	2.3
1945	5.0	6.5	−1.5	19.7	19.3	19.8	10.7	9.1	4.6	4.5	−.6	.4	2.2
1946	5.8	7.5	−1.7	17.2	19.6	24.8	9.1	15.7	5.6	10.2	−5.3	−2.4	1.8
1947	5.8	8.2	−2.4	22.9	25.9	31.8	11.3	20.5	6.3	14.2	−5.9	−2.9	2.3
1948	6.4	9.1	−2.7	30.3	33.4	35.6	12.4	23.2	7.0	16.2	−2.2	−3.2	2.4
1949	6.7	9.4	−2.7	28.0	31.1	29.2	10.2	19.0	7.2	11.8	1.9	−3.0	2.6
1950	7.7	10.5	−2.8	34.9	37.9	42.9	17.9	25.0	8.8	16.2	−5.0	−3.0	3.0
1951	8.3	11.5	−3.2	39.9	43.3	44.5	22.6	21.9	8.5	13.4	−1.2	−3.4	3.5
1952	9.4	12.7	−3.3	37.5	40.6	39.6	19.4	20.2	8.5	11.8	1.0	−3.2	3.9
1953	10.7	13.9	−3.3	37.7	40.2	41.2	20.3	20.9	8.8	12.1	−1.0	−2.5	4.4
1954	11.6	14.9	−3.2	36.6	38.4	38.7	17.6	21.1	9.1	11.9	−.3	−1.8	5.2
1955	12.0	15.3	−3.3	47.1	47.5	49.2	22.0	27.2	10.3	16.9	−1.7	−.4	5.8
1956	12.4	15.9	−3.5	45.7	46.9	49.6	22.0	27.6	11.1	16.6	−2.7	−1.2	6.5
1957	13.1	16.5	−3.5	45.3	46.6	48.1	21.4	26.7	11.5	15.2	−1.5	−1.3	7.8
1958	13.9	17.3	−3.4	40.3	41.6	41.9	19.0	22.9	11.3	11.6	−.3	−1.3	9.5
1959	14.6	18.0	−3.4	51.4	52.3	52.6	23.6	28.9	12.2	16.7	−.3	−.8	10.2
1960	15.3	18.7	−3.4	49.5	49.8	49.9	22.7	27.2	12.9	14.3	−.2	−.3	11.3
1961	15.8	19.1	−3.3	50.3	50.1	49.8	22.8	27.1	13.3	13.7	.3	.2	12.9
1962	16.5	19.8	−3.3	58.3	55.2	55.1	24.0	31.2	14.4	16.8	.0	3.1	14.6
1963	17.1	20.3	−3.2	63.6	59.8	59.8	26.2	33.5	15.5	18.0	.1	3.8	16.3
1964	17.3	20.5	−3.2	70.7	66.2	66.7	28.0	38.7	17.3	21.4	−.5	4.5	18.2
1965	18.1	21.3	−3.3	81.3	76.2	77.4	30.9	46.5	19.1	27.4	−1.2	5.2	20.9
1966	18.6	22.2	−3.6	86.6	81.2	83.3	33.7	49.6	19.4	30.2	−2.1	5.4	24.3
1967	19.6	23.5	−3.9	84.1	78.6	80.1	32.7	47.5	20.2	27.3	−1.6	5.5	27.4
1968	18.4	22.9	−4.5	90.7	85.4	89.1	39.4	49.7	22.0	27.7	−3.7	5.3	29.8
1969	18.4	24.2	−5.8	87.4	81.4	87.2	39.7	47.5	22.5	25.0	−5.9	6.1	34.6
1970	18.2	24.6	−6.4	74.7	69.5	76.0	34.4	41.7	22.5	19.2	−6.6	5.2	41.2
1971	18.6	25.9	−7.4	87.1	82.7	87.3	37.7	49.6	22.9	26.6	−4.6	4.3	46.3
1972	17.9	26.5	−8.6	100.7	94.9	101.5	41.9	59.6	24.4	35.2	−6.6	5.8	51.0
1973	18.0	28.1	−10.1	113.3	107.1	127.2	49.3	77.9	27.0	50.8	−20.0	6.2	59.6
1974	16.1	28.9	−12.7	101.7	99.4	138.9	51.8	87.1	29.7	57.3	−39.5	2.3	75.5
1975	13.5	28.6	−15.0	117.6	123.9	134.8	50.9	83.9	29.6	54.3	−11.0	−6.2	83.8
1976	11.9	28.9	−17.0	145.2	155.3	170.3	64.2	106.0	34.6	71.4	−14.9	−10.1	88.8
1977	8.2	28.8	−20.6	174.8	183.8	200.4	73.0	127.4	39.5	87.9	−16.6	−9.0	105.3
1978	9.3	34.2	−24.9	197.2	208.2	233.5	83.5	150.0	44.7	105.2	−25.3	−10.9	126.3
1979	5.6	35.7	−30.1	200.1	214.1	257.2	88.0	169.2	50.1	119.1	−43.2	−14.0	158.3
1980	6.6	41.4	−34.8	177.2	194.0	237.1	84.8	152.3	54.7	97.6	−43.1	−16.8	200.9
1981	13.3	52.2	−38.9	188.0	202.3	226.5	81.1	145.4	63.6	81.8	−24.2	−14.4	248.1
1982	13.6	54.4	−40.8	150.0	159.2	169.6	63.1	106.5	66.9	39.6	−10.4	−9.2	272.3
1983	13.2	55.0	−41.8	213.7	196.7	207.6	77.2	130.4	71.5	58.9	−10.9	17.0	281.0
1984	8.3	51.7	−43.4	264.7	230.2	235.7	95.4	140.3	78.3	62.0	−5.5	34.5	307.4
1985	7.6	52.4	−44.8	280.7	222.6	223.2	91.8	131.4	81.6	49.8	−.6	58.1	311.4
1986 ᵖ	15.6	60.6	−45.1	299.7	242.9	236.6	102.8	133.8	87.8	46.0	6.3	56.8	294.9
1982: IV	15.8	56.5	−40.7	146.1	150.7	164.1	59.8	104.3	68.5	35.8	−13.4	−4.5	266.9
1983: IV	12.4	54.3	−41.9	248.5	223.4	231.5	88.1	143.4	73.9	69.5	−8.1	25.1	290.2
1984: I	12.1	54.0	41.9	262.5	235.7	249.3	102.9	146.4	76.0	70.4	−13.6	26.7	292.5
II	8.4	51.9	−43.5	271.7	241.5	246.5	101.6	144.8	78.1	66.7	−4.9	30.2	305.2
III	7.1	51.1	−44.0	259.8	223.3	225.1	89.3	135.8	79.0	56.8	−1.8	36.5	316.1
IV	5.6	49.6	−44.0	265.0	220.3	221.9	87.8	134.1	80.1	54.0	−1.6	44.7	315.7
1985: I	6.8	50.4	−43.6	266.4	213.3	213.8	87.8	126.0	80.9	45.1	−.5	53.2	316.8
II	8.1	51.5	−43.4	274.3	215.4	213.8	87.1	120.7	81.4	45.3	1.6	58.9	311.4
III	7.3	53.0	−45.7	296.3	235.3	229.2	95.8	133.4	81.6	51.8	6.1	61.0	309.7
IV	8.3	54.7	−46.4	285.6	226.4	235.8	96.4	139.4	82.5	57.0	−9.4	59.2	307.6
1986: I	12.8	57.2	−44.4	296.4	239.0	222.5	95.7	126.9	85.2	41.7	16.5	57.3	304.9
II	16.3	61.3	−45.1	293.1	238.3	227.7	99.0	128.8	87.5	41.2	10.6	54.8	297.7
III	16.2	61.5	−45.3	302.0	246.5	240.4	104.4	135.9	88.8	47.2	6.1	55.5	292.9
IV ᵖ	17.0	62.5	−45.5	....	....	....	....	....	89.7	....	−8.0	59.5	284.1

[3] With inventory valuation adjustment and without capital consumption adjustment.

[4] Without inventory valuation and capital consumption adjustments.

Source: Department of Commerce, Bureau of Economic Analysis.

TABLE B–24.—*Sources of personal income, 1929–86*

[Billions of dollars; quarterly data at seasonally adjusted annual rates]

Year or quarter	Personal income	Wage and salary disbursements[1]						Other labor income[1]	Proprietors' income with inventory valuation and capital consumption adjustments	
		Total	Commodity-producing industries		Distributive industries	Service industries	Government and government enterprises			
			Total	Manufacturing					Farm	Nonfarm
1929	84.3	50.5	21.5	16.1	15.6	8.4	5.0	0.5	6.1	8.3
1933	46.3	29.0	9.8	7.8	8.8	5.2	5.2	.4	2.5	2.9
1939	72.1	46.0	17.4	13.6	13.3	7.1	8.2	.6	4.4	7.1
1940	77.6	49.9	19.7	15.6	14.2	7.5	8.5	.6	4.4	8.2
1941	95.2	62.1	27.5	21.7	16.3	8.1	10.2	.7	6.4	10.8
1942	122.4	82.1	39.1	30.9	18.0	9.0	16.0	.9	10.1	13.8
1943	150.7	105.6	49.0	40.9	20.1	9.9	26.6	1.1	12.0	16.8
1944	164.5	116.9	50.4	42.9	22.7	10.9	33.0	1.5	11.9	18.1
1945	170.0	117.5	45.9	38.2	24.8	11.9	34.9	1.8	12.4	19.1
1946	177.6	112.0	46.0	36.5	31.0	14.3	20.7	2.0	14.8	21.5
1947	190.2	123.1	54.2	42.5	35.2	16.1	17.5	2.4	15.1	20.4
1948	209.2	135.5	61.1	47.1	37.5	17.9	19.0	2.7	17.5	22.9
1949	206.4	134.8	57.8	44.6	37.7	18.5	20.8	2.9	12.8	23.1
1950	228.1	147.2	64.8	50.3	39.9	19.9	22.6	3.7	13.6	25.2
1951	256.5	171.5	76.4	59.4	44.4	21.6	29.2	4.6	16.0	28.0
1952	273.8	185.6	82.1	64.2	47.0	23.2	33.3	5.2	15.0	29.4
1953	290.5	199.0	89.8	71.3	49.9	25.0	34.4	5.9	13.0	30.4
1954	293.0	197.2	85.8	67.6	50.3	26.2	34.9	6.1	12.4	31.1
1955	314.2	212.1	93.3	73.9	53.6	28.7	36.6	7.0	11.3	34.0
1956	337.2	229.0	100.8	79.5	58.0	31.5	38.8	8.0	11.1	35.8
1957	356.3	239.9	104.4	82.5	60.7	33.8	41.0	9.0	11.0	37.8
1958	367.1	241.3	100.3	78.7	61.1	35.9	44.1	9.4	13.1	38.5
1959	390.7	259.8	109.9	86.9	65.1	38.8	46.0	10.6	10.8	40.9
1960	409.4	272.8	113.4	89.8	68.6	41.7	49.2	11.2	11.6	40.5
1961	426.0	280.5	114.0	89.9	69.6	44.4	52.4	11.8	12.0	42.3
1962	453.2	299.3	122.2	96.8	73.3	47.6	56.3	13.0	12.1	44.4
1963	476.3	314.8	127.4	100.7	76.8	50.7	60.0	14.0	11.9	45.7
1964	510.2	337.7	136.0	107.3	82.0	54.9	64.9	15.7	10.7	49.8
1965	552.0	363.7	146.6	115.7	87.9	59.4	69.9	17.8	13.0	52.1
1966	600.8	400.3	161.6	128.2	95.1	65.3	78.3	19.9	14.0	55.5
1967	644.5	428.9	169.0	134.3	101.6	72.0	86.4	21.7	12.7	58.4
1968	707.2	471.9	184.1	146.0	110.8	80.4	96.6	25.2	12.8	62.6
1969	772.9	518.3	200.4	157.7	121.7	90.6	105.5	28.5	14.6	64.7
1970	831.8	551.5	203.7	158.4	131.2	99.4	117.1	32.5	14.7	65.4
1971	894.0	583.9	209.1	160.5	140.4	107.9	126.5	36.7	15.5	71.4
1972	981.6	638.7	228.2	175.6	153.3	119.7	137.4	43.0	19.4	79.0
1973	1,101.7	708.7	255.9	196.6	170.3	133.9	148.7	49.2	33.7	85.3
1974	1,210.1	772.6	276.5	211.8	186.8	148.6	160.9	56.5	27.5	91.3
1975	1,313.4	814.6	277.1	211.6	198.1	163.4	176.0	65.9	25.4	100.0
1976	1,451.4	899.5	309.7	238.0	219.5	181.6	188.6	79.3	20.6	117.1
1977	1,607.5	993.9	346.1	266.7	242.7	202.8	202.3	94.1	20.5	132.4
1978	1,812.4	1,119.3	392.3	300.1	274.6	232.9	219.4	107.7	27.0	149.2
1979	2,034.0	1,252.1	441.4	334.8	307.8	266.8	236.1	122.7	31.7	160.1
1980	2,258.5	1,372.0	470.7	355.6	335.5	305.6	260.2	138.4	20.5	160.1
1981	2,520.9	1,510.3	512.2	386.7	366.8	346.9	284.4	150.3	30.7	156.1
1982	2,670.8	1,586.1	511.7	384.0	384.2	384.4	305.9	163.6	24.6	150.9
1983	2,838.6	1,676.6	523.1	397.4	404.2	425.1	324.3	173.6	12.4	178.4
1984	3,110.2	1,836.8	577.8	439.1	442.2	470.6	346.2	184.5	31.5	205.3
1985	3,314.5	1,966.1	607.7	460.1	469.8	516.4	372.2	196.9	29.2	225.2
1986 p	3,487.0	2,073.8	623.3	471.3	488.0	566.8	395.7	208.8	26.4	252.5
1982: IV	2,729.2	1,603.6	501.8	377.4	389.3	398.5	314.0	168.0	28.5	159.8
1983: IV	2,941.8	1,739.4	545.4	415.5	420.8	443.2	330.0	177.8	19.3	188.6
1984: I	3,034.2	1,783.9	563.5	427.8	429.2	453.1	338.2	181.0	44.5	198.0
II	3,077.4	1,820.3	572.9	435.8	439.1	465.0	343.4	183.5	26.4	203.2
III	3,139.7	1,854.9	582.9	443.0	446.7	476.1	349.2	185.5	24.7	209.9
IV	3,189.6	1,888.1	591.9	449.9	454.0	488.1	354.0	188.2	30.4	210.3
1985: I	3,253.1	1,922.3	600.1	455.1	460.2	498.8	363.2	191.7	32.9	217.8
II	3,298.7	1,953.3	605.0	457.3	467.7	511.0	369.6	195.3	33.0	222.5
III	3,323.2	1,976.0	608.3	460.7	472.4	521.1	374.2	198.8	21.6	227.7
IV	3,382.9	2,012.8	617.7	467.5	478.9	534.6	381.6	201.7	29.4	232.7
1986: I	3,432.6	2,044.1	622.0	470.5	485.2	549.6	387.2	204.5	24.4	240.9
II	3,483.3	2,058.8	620.8	468.8	484.3	561.3	392.5	207.3	39.5	249.6
III	3,498.8	2,081.1	621.8	470.0	488.3	572.6	398.4	210.4	19.6	258.0
IV p	3,533.4	2,111.1	628.7	475.8	494.2	583.8	404.4	213.0	22.2	261.6

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[1] The total of wage and salary disbursements and other labor income differs from compensation of employees in Table B–23 in that it excludes employer contributions for social insurance and the excess of wage accruals over wage disbursements.

See next page for continuation of table.

TABLE B-24.—*Sources of personal income, 1929–86*—Continued

[Billions of dollars; quarterly data at seasonally adjusted annual rates]

Year or quarter	Rental income of persons with capital consumption adjustment	Personal dividend income	Personal interest income	Transfer payments							Less: Personal contributions for social insurance	Nonfarm personal income [2]
				Total	Old-age, survivors, disability, and health insurance benefits	Government unemployment insurance benefits	Veterans benefits	Government employees retirement benefits	Aid to families with dependent children (AFDC)	Other		
1929	4.9	5.8	6.9	1.5			0.6	0.1		0.8	0.1	
1933	2.0	2.0	5.5	2.1			.6	.2		1.4	.2	
1939	2.6	3.8	5.3	3.0	0.0	0.4	.5	.3		1.7	.6	
1940	2.7	4.0	5.3	3.1	.0	.5	.5	.3		1.7	.7	
1941	3.2	4.4	5.3	3.1	.1	.4	.5	.3		1.8	.8	
1942	4.1	4.3	5.2	3.1	.1	.4	.5	.3		1.8	1.2	
1943	4.6	4.4	5.1	3.0	.2	.1	.5	.4		1.8	1.8	
1944	4.8	4.6	5.2	3.6	.2	.1	1.0	.4		2.0	2.2	
1945	5.0	4.6	5.8	6.2	.3	.4	3.0	.5		2.0	2.3	
1946	5.8	5.6	6.6	11.3	.4	1.1	7.0	.7		2.1	2.0	159.9
1947	5.8	6.3	7.5	11.7	.5	.8	7.0	.7	0.3	2.5	2.1	172.0
1948	6.4	7.0	8.0	11.3	.6	.9	5.9	.7	.4	2.9	2.2	138.3
1949	6.7	7.2	8.7	12.5	.7	1.9	5.3	.9	.5	3.3	2.2	190.6
1950	7.7	8.8	9.6	15.2	1.0	1.5	7.7	1.0	.6	3.5	2.9	211.2
1951	8.3	8.5	10.4	12.6	1.9	.9	4.6	1.1	.6	3.6	3.4	237.1
1952	9.4	8.5	11.2	13.3	2.2	1.1	4.3	1.2	.5	3.9	3.8	255.4
1953	10.7	8.8	12.4	14.3	3.0	1.0	4.1	1.4	.5	4.2	4.0	274.2
1954	11.6	9.1	13.7	16.3	3.6	2.2	4.2	1.5	.6	4.2	4.6	277.5
1955	12.0	10.3	14.9	17.7	4.9	1.5	4.4	1.7	.6	4.5	5.2	299.6
1956	12.4	11.1	16.6	18.9	5.7	1.5	4.4	1.9	.6	4.8	5.8	322.8
1957	13.1	11.5	18.7	21.8	7.3	1.9	4.5	2.2	.7	5.2	6.7	341.9
1958	13.9	11.3	20.3	26.3	8.5	4.1	4.7	2.5	.8	5.7	6.9	350.4
1959	14.6	12.2	22.3	27.4	10.2	2.8	4.6	2.8	.9	6.2	7.9	376.2
1960	15.3	12.9	24.9	29.5	11.1	3.0	4.6	3.1	1.0	6.7	9.3	393.9
1961	15.8	13.3	26.3	33.5	12.6	4.3	5.0	3.4	1.1	7.1	9.7	409.9
1962	16.5	14.4	28.9	34.7	14.3	3.1	4.7	3.7	1.3	7.6	10.3	436.7
1963	17.1	15.5	32.2	36.9	15.2	3.0	4.8	4.2	1.4	8.3	11.8	460.0
1964	17.3	17.3	35.5	38.7	16.0	2.7	4.7	4.7	1.5	9.1	12.6	494.9
1965	18.1	19.1	39.6	41.9	18.1	2.3	4.9	5.2	1.7	9.8	13.3	534.0
1966	18.6	19.4	44.2	46.6	20.8	1.9	4.9	6.1	1.9	11.2	17.8	581.5
1967	19.6	20.2	48.2	55.5	25.5	2.2	5.6	6.9	2.3	13.0	20.6	626.3
1968	18.4	21.9	53.2	64.0	30.2	2.1	5.9	7.6	2.8	15.3	22.9	688.7
1969	18.4	22.4	60.9	71.4	32.9	2.2	6.7	8.7	3.5	17.3	26.2	752.1
1970	18.2	22.2	69.3	85.9	38.5	4.0	7.7	10.2	4.8	20.7	27.9	810.4
1971	18.6	22.6	74.7	101.5	44.5	5.8	8.8	11.8	6.2	24.5	30.7	871.8
1972	17.9	24.1	80.8	113.3	49.6	5.7	9.7	13.8	6.9	27.6	34.5	955.0
1973	18.0	26.6	93.3	129.6	60.4	4.4	10.4	16.0	7.2	31.2	42.6	1,059.7
1974	16.1	28.9	111.9	153.2	70.1	6.8	11.8	19.0	7.9	37.5	47.9	1,172.6
1975	13.5	28.7	122.5	193.1	81.4	17.6	14.5	22.7	9.2	47.6	50.4	1,276.9
1976	11.9	33.8	134.1	210.7	92.9	15.8	14.4	26.1	10.1	51.5	55.5	1,417.9
1977	8.2	38.2	155.4	226.1	104.9	12.7	13.8	29.0	10.6	55.1	61.2	1,572.6
1978	9.3	43.0	182.5	244.0	116.2	9.7	13.9	32.7	10.7	60.9	69.8	1,769.3
1979	5.6	48.1	221.5	273.1	131.8	9.8	14.4	36.9	11.0	69.1	81.0	1,983.2
1980	6.6	52.9	271.9	324.7	154.2	16.1	15.0	43.0	12.4	84.0	88.6	2,215.8
1981	13.3	61.3	335.4	368.1	182.0	15.9	16.1	49.4	13.0	91.8	104.5	2,465.6
1982	13.6	63.9	369.7	410.6	204.5	25.2	16.4	54.6	13.3	96.5	112.3	2,618.7
1983	13.2	68.7	393.1	442.6	221.7	26.3	16.6	58.7	14.2	105.1	120.1	2,799.0
1984	8.3	74.7	446.9	455.6	235.7	15.8	16.4	60.8	14.9	112.0	133.5	3,052.2
1985	7.6	76.4	476.2	487.1	253.4	15.7	16.7	66.6	15.4	119.2	150.2	3,261.0
1986 p	15.6	81.2	475.4	513.7	266.7	16.3	16.8	70.6	16.2	127.1	160.3	3,437.8
1982: IV	15.8	65.4	366.2	435.4	216.6	31.8	16.6	56.1	13.6	100.6	113.5	2,672.8
1983: IV	12.4	71.0	411.6	445.5	227.0	20.0	16.5	60.2	14.5	107.3	123.6	2,895.6
1984: I	12.1	72.9	421.4	450.6	231.2	17.3	16.4	61.1	15.0	109.6	130.3	2,962.7
II	8.4	74.7	438.9	454.6	233.7	15.6	16.4	61.8	15.0	112.0	132.5	3,024.2
III	7.1	75.2	460.6	456.4	235.8	15.1	16.5	62.5	14.6	111.9	134.7	3,088.6
IV	5.6	75.9	466.8	461.8	241.9	15.5	16.3	57.7	14.9	114.6	136.7	3,133.2
1985: I	6.8	76.3	473.8	479.4	249.3	16.7	16.8	65.3	15.1	116.1	147.8	3,194.9
II	8.1	76.4	475.3	484.1	251.1	15.8	16.8	66.2	15.3	118.9	149.4	3,241.0
III	7.3	76.3	475.2	491.1	256.5	15.1	16.7	67.0	15.6	120.3	150.7	3,277.8
IV	8.3	76.7	480.6	493.6	256.8	15.3	16.4	68.0	15.7	121.3	152.9	3,330.4
1986: I	12.8	79.1	480.8	504.7	263.2	15.5	17.0	69.1	16.0	124.0	158.6	3,385.4
II	16.3	81.1	480.1	510.1	264.1	16.3	17.0	70.1	16.2	126.5	159.5	3,421.1
III	16.2	82.0	473.8	518.5	269.6	16.9	16.7	71.0	16.3	127.9	160.8	3,456.4
IV p	17.0	82.7	466.7	521.7	270.2	16.5	16.4	72.1	16.4	130.1	162.5	3,488.3

[2] Personal income exclusive of farm proprietors' income, farm wages, farm other labor income, and farm net interest.

Note.—The industry classification of wage and salary disbursements and proprietors' income is on an establishment basis and is based on the 1972 Standard Industrial Classification (SIC) beginning 1948 and on the 1942 SIC prior to 1948.

Source: Department of Commerce, Bureau of Economic Analysis.

TABLE B–25.—*Disposition of personal income, 1929–86*

[Billions of dollars, except as noted; quarterly data at seasonally adjusted annual rates]

Year or quarter	Personal income	Less: Personal tax and nontax payments	Equals: Disposable personal income	Less: Personal outlays				Equals: Personal saving	Percent of disposable personal income		
				Total	Personal consumption expenditures	Interest paid by consumers to business	Personal transfer payments to foreigners (net)		Personal outlays		Personal saving
									Total	Personal consumption expenditures	
1929	84.3	2.6	81.7	79.2	77.3	1.5	0.3	2.6	96.8	94.5	3.2
1933	46.3	1.4	44.9	46.5	45.8	.5	.2	−1.6	103.6	102.1	−3.6
1939	72.1	2.4	69.7	67.9	67.0	.7	.2	1.8	97.4	96.2	2.6
1940	77.6	2.6	75.0	72.0	71.0	.8	.2	3.0	96.0	94.7	4.0
1941	95.2	3.3	91.9	81.9	80.8	.9	.2	10.0	89.1	87.9	10.9
1942	122.4	5.9	116.4	89.5	88.6	.7	.1	27.0	76.8	76.1	23.2
1943	150.7	17.8	132.9	100.2	99.5	.5	.2	32.7	75.4	74.8	24.6
1944	164.5	18.9	145.6	109.0	108.2	.5	.4	36.5	74.9	74.4	25.1
1945	170.0	20.8	149.2	120.5	119.6	.5	.5	28.7	80.8	80.2	19.2
1946	177.6	18.7	158.9	145.3	143.9	.7	.7	13.6	91.4	90.6	8.6
1947	190.2	21.4	168.8	163.6	161.9	1.0	.7	5.2	96.9	95.9	3.1
1948	209.2	21.0	188.1	177.0	174.9	1.4	.7	11.1	94.1	93.0	5.9
1949	206.4	18.5	187.9	180.6	178.3	1.7	.5	7.4	96.1	94.9	3.9
1950	228.1	20.6	207.5	194.8	192.1	2.3	.4	12.6	93.9	92.6	6.1
1951	256.5	28.9	227.6	211.0	208.1	2.5	.4	16.6	92.7	91.4	7.3
1952	273.8	34.0	239.8	222.4	219.1	2.9	.4	17.4	92.7	91.4	7.3
1953	290.5	35.5	255.1	236.7	232.6	3.6	.5	18.4	92.8	91.2	7.2
1954	293.0	32.5	260.5	244.1	239.8	3.8	.5	16.4	93.7	92.0	6.3
1955	314.2	35.4	278.8	262.8	257.9	4.4	.4	16.0	94.2	92.5	5.8
1956	337.2	39.7	297.5	276.2	270.6	5.1	.5	21.3	92.8	90.9	7.2
1957	356.3	42.4	313.9	291.2	285.3	5.5	.5	22.7	92.8	90.9	7.2
1958	367.1	42.2	324.9	300.6	294.6	5.6	.4	24.3	92.5	90.7	7.5
1959	390.7	46.1	344.6	322.8	316.3	6.1	.4	21.8	93.7	91.8	6.3
1960	409.4	50.5	358.9	338.1	330.7	7.0	.4	20.8	94.2	92.1	5.8
1961	426.0	52.2	373.8	348.9	341.1	7.3	.5	24.9	93.4	91.3	6.6
1962	453.2	57.0	396.2	370.2	361.9	7.8	.5	25.9	93.5	91.4	6.5
1963	476.3	60.5	415.8	391.2	381.7	8.8	.6	24.6	94.1	91.8	5.9
1964	510.2	58.8	451.4	419.9	409.3	9.9	.7	31.5	93.0	90.7	7.0
1965	552.0	65.2	486.8	452.5	440.7	11.1	.7	34.3	93.0	90.5	7.0
1966	600.8	74.9	525.9	489.9	477.3	12.0	.7	36.0	93.2	90.8	6.8
1967	644.5	82.4	562.1	516.9	503.6	12.5	.9	45.1	92.0	89.6	8.0
1968	707.2	97.7	609.6	567.1	552.5	13.8	.9	42.5	93.0	90.6	7.0
1969	772.9	116.3	656.7	614.5	597.9	15.6	1.0	42.2	93.6	91.0	6.4
1970	831.8	116.2	715.6	657.9	640.0	16.7	1.2	57.7	91.9	89.4	8.1
1971	894.0	117.3	776.8	710.5	691.6	17.7	1.2	66.3	91.5	89.0	8.5
1972	981.6	142.0	839.6	778.2	757.6	19.5	1.1	61.4	92.7	90.2	7.3
1973	1,101.7	152.0	949.8	860.8	837.2	22.3	1.3	89.0	90.6	88.2	9.4
1974	1,210.1	171.8	1,038.4	941.7	916.5	24.1	1.0	96.7	90.7	88.3	9.3
1975	1,313.4	170.6	1,142.8	1,038.2	1,012.8	24.4	1.0	104.6	90.8	88.6	9.2
1976	1,451.4	198.7	1,252.6	1,156.9	1,129.3	26.6	1.0	95.8	92.4	90.2	7.6
1977	1,607.5	228.1	1,379.3	1,288.6	1,257.2	30.5	.9	90.7	93.4	91.1	6.6
1978	1,812.4	261.1	1,551.2	1,441.1	1,403.5	36.7	.9	110.2	92.9	90.5	7.1
1979	2,034.0	304.7	1,729.3	1,611.3	1,566.8	43.5	1.0	118.1	93.2	90.6	6.8
1980	2,258.5	340.5	1,918.0	1,781.1	1,732.6	47.4	1.1	136.9	92.9	90.3	7.1
1981	2,520.9	393.3	2,127.6	1,968.1	1,915.1	52.0	1.0	159.4	92.5	90.0	7.5
1982	2,670.8	409.3	2,261.4	2,107.5	2,050.7	55.5	1.3	153.9	93.2	90.7	6.8
1983	2,838.6	410.5	2,428.1	2,297.4	2,234.5	61.9	1.0	130.6	94.6	92.0	5.4
1984	3,110.2	439.6	2,670.6	2,501.9	2,428.2	72.3	1.5	168.7	93.7	90.9	6.3
1985	3,314.5	486.5	2,828.0	2,684.7	2,600.5	82.6	1.6	143.3	94.9	92.0	5.1
1986 ^{p}	3,487.0	513.4	2,973.7	2,857.4	2,762.4	93.6	1.4	116.3	96.1	92.9	3.9
1982: IV	2,729.2	411.1	2,318.1	2,174.9	2,117.0	56.8	1.1	143.1	93.8	91.3	6.2
1983: IV	2,941.8	413.9	2,527.9	2,382.5	2,315.8	65.5	1.2	145.4	94.2	91.6	5.8
1984: I	3,034.2	421.5	2,612.7	2,433.5	2,363.8	68.2	1.4	179.2	93.1	90.5	6.9
II	3,077.4	431.2	2,646.3	2,488.7	2,416.1	71.1	1.5	157.6	94.0	91.3	6.0
III	3,139.7	445.9	2,693.8	2,520.9	2,445.6	73.9	1.4	172.9	93.6	90.8	6.4
IV	3,189.6	460.0	2,729.6	2,564.6	2,487.2	75.8	1.5	165.0	94.0	91.1	6.0
1985: I	3,253.1	497.7	2,755.4	2,611.3	2,530.9	78.4	2.1	144.1	94.8	91.9	5.2
II	3,298.7	456.4	2,842.3	2,658.7	2,576.0	81.2	1.4	183.6	93.5	90.6	6.5
III	3,323.2	491.2	2,832.0	2,712.4	2,627.1	83.8	1.5	119.6	95.8	92.8	4.2
IV	3,382.9	500.7	2,882.2	2,756.4	2,667.9	87.0	1.6	125.8	95.6	92.6	4.4
1986: I	3,432.6	497.5	2,935.1	2,789.4	2,697.9	89.8	1.7	145.6	95.0	91.9	5.0
II	3,483.3	504.8	2,978.5	2,825.5	2,732.0	92.3	1.2	153.1	94.9	91.7	5.1
III	3,498.8	519.0	2,979.9	2,895.8	2,799.8	94.9	1.2	84.1	97.2	94.0	2.8
IV ^{p}	3,533.4	532.2	3,001.2	2,918.9	2,819.9	97.5	1.5	82.3	97.3	94.0	2.7

Source: Department of Commerce, Bureau of Economic Analysis.

TABLE B–26.—*Total and per capita disposable personal income and personal consumption expenditures in current and 1982 dollars, 1929–86*

[Quarterly data at seasonally adjusted annual rates, except as noted]

Year or quarter	Disposable personal income				Personal consumption expenditures				Population (thousands)[1]
	Total (billions of dollars)		Per capita (dollars)		Total (billions of dollars)		Per capita (dollars)		
	Current dollars	1982 dollars	Current dollars	1982 dollars	Current dollars	1982 dollars	Current dollars	1982 dollars	
1929	81.7	498.6	671	4,091	77.3	471.4	634	3,868	121,878
1933	44.9	370.8	357	2,950	45.8	378.7	365	3,013	125,690
1939	69.7	499.5	532	3,812	67.0	480.5	511	3,667	131,028
1940	75.0	530.7	568	4,017	71.0	502.6	538	3,804	132,122
1941	91.9	604.1	689	4,528	80.8	531.1	606	3,981	133,402
1942	116.4	693.0	863	5,138	88.6	527.6	657	3,912	134,860
1943	132.9	721.4	972	5,276	99.5	539.9	727	3,949	136,739
1944	145.6	749.3	1,052	5,414	108.2	557.1	782	4,026	138,397
1945	149.2	739.5	1,066	5,285	119.6	592.7	855	4,236	139,928
1946	158.9	723.3	1,124	5,115	143.9	655.0	1,018	4,632	141,389
1947	168.8	694.8	1,171	4,820	161.9	666.6	1,123	4,625	144,126
1948	188.1	733.1	1,283	5,000	174.9	681.8	1,193	4,650	146,631
1949	187.9	733.2	1,260	4,915	178.3	695.4	1,195	4,661	149,188
1950	207.5	791.8	1,368	5,220	192.1	733.2	1,267	4,834	151,684
1951	227.6	819.0	1,475	5,308	208.1	748.7	1,349	4,853	154,287
1952	239.8	844.3	1,528	5,379	219.1	771.4	1,396	4,915	156,954
1953	255.1	880.0	1,599	5,515	232.6	802.5	1,458	5,029	159,565
1954	260.5	894.0	1,604	5,505	239.8	822.7	1,477	5,066	162,391
1955	278.8	944.5	1,687	5,714	257.9	873.8	1,560	5,287	165,275
1956	297.5	989.4	1,769	5,881	270.6	899.8	1,608	5,349	168,221
1957	313.9	1,012.1	1,833	5,909	285.3	919.7	1,666	5,370	171,274
1958	324.9	1,028.8	1,865	5,908	294.6	932.9	1,692	5,357	174,141
1959	344.6	1,067.2	1,946	6,027	316.3	979.4	1,786	5,531	177,073
1960	358.9	1,091.1	1,986	6,036	330.7	1,005.1	1,829	5,561	180,760
1961	373.8	1,123.2	2,034	6,113	341.1	1,025.2	1,857	5,579	183,742
1962	396.2	1,170.2	2,123	6,271	361.9	1,069.0	1,940	5,729	186,590
1963	415.8	1,207.3	2,197	6,378	381.7	1,108.4	2,017	5,855	189,300
1964	451.4	1,291.0	2,352	6,727	409.3	1,170.6	2,133	6,099	191,927
1965	486.8	1,365.7	2,505	7,027	440.7	1,236.4	2,268	6,362	194,347
1966	525.9	1,431.3	2,675	7,280	477.3	1,298.9	2,428	6,607	196,599
1967	562.1	1,493.2	2,828	7,513	503.6	1,337.7	2,534	6,730	198,752
1968	609.6	1,551.3	3,037	7,728	552.5	1,405.9	2,752	7,003	200,745
1969	656.7	1,599.8	3,239	7,891	597.9	1,456.7	2,949	7,185	202,736
1970	715.6	1,668.1	3,489	8,134	640.0	1,492.0	3,121	7,275	205,089
1971	776.8	1,728.4	3,740	8,322	691.6	1,538.8	3,330	7,409	207,692
1972	839.6	1,797.4	4,000	8,562	757.6	1,621.9	3,609	7,726	209,924
1973	949.8	1,916.3	4,481	9,042	837.2	1,689.6	3,950	7,972	211,939
1974	1,038.4	1,896.6	4,855	8,867	916.5	1,674.0	4,285	7,826	213,898
1975	1,142.8	1,931.7	5,291	8,944	1,012.8	1,711.9	4,689	7,926	215,981
1976	1,252.6	2,001.0	5,744	9,175	1,129.3	1,803.9	5,178	8,272	218,086
1977	1,379.3	2,066.6	6,262	9,381	1,257.2	1,883.8	5,707	8,551	220,289
1978	1,551.2	2,167.4	6,968	9,735	1,403.5	1,961.0	6,304	8,808	222,629
1979	1,729.3	2,212.6	7,682	9,829	1,566.8	2,004.4	6,960	8,904	225,106
1980	1,918.0	2,214.3	8,421	9,722	1,732.6	2,000.4	7,607	8,783	227,754
1981	2,127.6	2,248.6	9,243	9,769	1,915.1	2,024.2	8,320	8,794	230,182
1982	2,261.4	2,261.5	9,724	9,725	2,050.7	2,050.7	8,818	8,818	232,549
1983	2,428.1	2,331.9	10,340	9,930	2,234.5	2,146.0	9,516	9,139	234,829
1984	2,670.6	2,470.6	11,265	10,421	2,428.2	2,246.3	10,243	9,475	237,067
1985	2,828.0	2,528.0	11,817	10,563	2,600.5	2,324.5	10,866	9,713	239,317
1986 p	2,973.7	2,603.7	12.312	10,780	2,762.4	2,418.6	11,437	10,014	241,522
1982: IV	2,318.1	2,276.1	9,929	9,749	2,117.0	2,078.7	9,068	8,904	233,466
1983: IV	2,527.9	2,392.7	10,725	10,151	2,315.8	2,191.9	9,825	9,299	235,707
1984: I	2,612.7	2,446.9	11,060	10,358	2,363.8	2,213.8	10,007	9,372	236,222
II	2,646.3	2,460.3	11,178	10,392	2,416.1	2,246.3	10,206	9,489	236,742
III	2,693.8	2,481.9	11,350	10,457	2,445.6	2,253.3	10,304	9,494	237,347
IV	2,729.6	2,493.1	11,471	10,477	2,487.2	2,271.7	10,453	9,547	237,953
1985: I	2,755.4	2,495.7	11,555	10,466	2,530.9	2,292.3	10,613	9,613	238,469
II	2,842.3	2,550.8	11,893	10,674	2,576.0	2,311.9	10,779	9,674	238,985
III	2,832.0	2,524.7	11,819	10,537	2,627.1	2,342.0	10,964	9,775	239,605
IV	2,882.2	2,540.7	11,999	10,577	2,667.9	2,351.7	11,107	9,790	240,206
1986: I	2,935.1	2,581.2	12,193	10,723	2,697.9	2,372.7	11,208	9,857	240,709
II	2,978.5	2,625.8	12,348	10,886	2,732.0	2,408.4	11,326	9,985	241,215
III	2,979.9	2,605.5	12,324	10,776	2,799.8	2,448.0	11,579	10,125	241,789
IV p	3,001.2	2,602.3	12,382	10,737	2,819.9	2,445.1	11,634	10,088	242,376

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[1] Population of the United States including Armed Forces overseas; includes Alaska and Hawaii beginning 1960. Annual data are for July 1 through 1958 and are averages of quarterly data beginning 1959. Quarterly data are averages for the period.

Source: Department of Commerce (Bureau of Economic Analysis and Bureau of the Census).

TABLE B-27.—*Gross saving and investment, 1929–86*

[Billions of dollars; quarterly data at seasonally adjusted annual rates]

Year or quarter	Gross saving								Gross investment			Statistical discrepancy
	Total	Gross private saving			Government surplus or deficit (−), national income and product accounts			Capital grants received by the United States (net) [2]	Total	Gross private domestic investment	Net foreign investment [3]	
		Total	Personal saving	Gross business saving [1]	Total	Federal	State and local					
1929	15.9	14.9	2.6	12.3	1.0	1.2	−0.2		17.4	16.7	0.8	1.5
1933	.6	1.9	−1.6	3.6	−1.4	−1.3	−.1		1.7	1.6	.2	1.2
1939	8.9	11.1	1.8	9.3	−2.2	−2.2	.0		10.6	9.5	1.0	1.7
1940	13.6	14.3	3.0	11.3	−.7	−1.3	.6		15.0	13.4	1.5	1.4
1941	18.8	22.6	10.0	12.6	−3.8	−5.1	1.3		19.5	18.3	1.3	.7
1942	10.9	42.3	27.0	15.3	−31.4	−33.1	1.8		10.2	10.3	−.1	−.7
1943	5.8	50.0	32.7	17.3	−44.2	−46.6	2.4		4.1	6.2	−2.1	−1.7
1944	3.0	54.9	36.5	18.4	−51.8	−54.5	2.7		5.8	7.7	−2.0	2.7
1945	5.9	45.4	28.7	16.8	−39.5	−42.1	2.6		10.0	11.3	−1.3	4.0
1946	35.7	30.3	13.6	16.7	5.4	3.5	1.9		36.4	31.5	4.9	.7
1947	42.5	28.1	5.2	23.0	14.4	13.4	1.0		44.3	35.0	9.3	1.8
1948	50.8	42.4	11.1	31.3	8.4	8.3	.1		49.6	47.1	2.4	−1.3
1949	36.5	39.9	7.4	32.5	−3.4	−2.6	−.7		37.3	36.5	.9	.8
1950	52.5	44.5	12.6	31.8	8.0	9.2	−1.2		53.2	55.1	−1.8	.8
1951	58.7	52.6	16.6	36.0	6.1	6.5	−.4		61.4	60.5	.9	2.7
1952	52.3	56.1	17.4	38.7	−3.8	−3.7	.0		54.2	53.5	.6	1.8
1953	51.0	58.0	18.4	39.6	−7.0	−7.1	.1		53.6	54.9	−1.3	2.6
1954	51.6	58.8	16.4	42.3	−7.1	−6.0	−1.1		54.3	54.1	.2	2.7
1955	68.4	65.2	16.0	49.2	3.1	4.4	−1.3		70.2	69.7	.4	1.8
1956	77.3	72.1	21.3	50.8	5.2	6.1	−.9		75.4	72.7	2.8	−1.9
1957	77.1	76.1	22.7	53.5	.9	2.3	−1.4		75.9	71.1	4.8	−1.2
1958	64.5	77.1	24.3	52.9	−12.6	−10.3	−2.4		64.5	63.6	.9	−.1
1959	80.5	82.1	21.8	60.3	−1.6	−1.1	−.4		79.0	80.2	−1.2	−1.5
1960	84.2	81.1	20.8	60.3	3.1	3.0	.1		81.4	78.2	3.2	−2.8
1961	82.6	86.8	24.9	62.0	−4.3	−3.9	−.4		81.3	77.1	4.2	−1.2
1962	91.4	95.2	25.9	69.3	−3.8	−4.2	.5		91.5	87.6	3.8	.0
1963	98.7	97.9	24.6	73.3	.7	.3	.5		98.1	93.1	4.9	−.6
1964	108.5	110.8	31.5	79.3	−2.3	−3.3	1.0		107.1	99.6	7.5	−1.4
1965	123.5	123.0	34.3	88.7	.5	.5	.0		122.3	116.2	6.2	−1.2
1966	130.3	131.6	36.0	95.6	−1.3	−1.8	.5		132.4	128.6	3.8	2.1
1967	129.5	143.8	45.1	98.6	−14.2	−13.2	−1.1		129.2	125.7	3.5	−.4
1968	139.7	145.7	42.5	103.3	−6.0	−6.0	.1		138.6	137.0	1.6	−1.1
1969	158.8	148.9	42.2	106.7	9.9	8.4	1.5		154.9	153.2	1.7	−3.9
1970	154.7	164.5	57.7	106.7	−10.6	−12.4	1.8	0.9	153.6	148.8	4.8	−1.1
1971	171.9	190.6	66.3	124.3	−19.5	−22.0	2.6	.7	173.7	172.5	1.3	1.8
1972	200.7	203.4	61.4	142.0	−3.4	−16.8	13.5	.7	199.1	202.0	−2.9	−1.6
1973	251.9	244.0	89.0	155.0	7.9	−5.6	13.5	0	247.6	238.8	8.8	−4.3
1974	247.9	254.3	96.7	157.6	−4.3	−11.6	7.2	[4] −2.0	246.2	240.8	5.4	−1.7
1975	238.7	303.6	104.6	198.9	−64.9	−69.4	4.5	0	241.2	219.6	21.6	2.5
1976	283.0	321.4	95.8	225.6	−38.4	−53.5	15.2	0	286.6	277.7	9.0	3.6
1977	335.4	354.5	90.7	263.8	−19.1	−46.0	26.9	0	335.3	344.1	−8.7	.0
1978	408.6	409.0	110.2	298.9	−.4	−29.3	28.9	0	406.7	416.8	−10.1	−1.9
1979	458.4	445.8	118.1	327.7	11.5	−16.1	27.6	1.1	457.4	454.8	2.6	−1.0
1980	445.0	478.4	136.9	341.5	−34.5	−61.3	26.8	1.2	450.0	437.0	13.0	4.9
1981	522.0	550.5	159.4	391.1	−29.7	−63.8	34.1	1.1	526.1	515.5	10.6	4.1
1982	446.4	557.1	153.9	403.2	−110.8	−145.9	35.1	0	446.3	447.3	−1.0	−.1
1983	463.6	592.2	130.6	461.6	−128.6	−176.0	47.5	0	468.8	502.3	−33.5	5.2
1984	573.3	674.8	168.7	506.1	−101.5	−170.0	68.5	0	571.4	662.1	−90.7	−1.9
1985	551.5	687.8	143.3	544.5	−136.3	−198.0	61.7	0	545.9	661.1	−115.2	−5.5
1986 ᵖ	537.4	680.5	116.3	564.2	−143.1	−204.0	60.8	0	542.8	686.4	−143.7	5.4
1982: IV	387.4	554.2	143.1	411.1	−166.8	−202.6	35.8	0	394.2	409.6	−15.4	6.8
1983: IV	519.9	632.8	145.4	487.3	−112.9	−169.2	56.4	0	522.4	579.8	−57.4	2.5
1984: I	580.7	668.3	179.2	489.1	−87.5	−154.0	66.5	0	585.8	659.5	−73.7	5.0
II	568.7	662.6	157.6	505.0	−93.9	−163.9	70.0	0	565.5	657.5	−92.1	−3.2
III	578.2	682.9	172.9	510.0	−104.8	−171.9	67.2	0	577.6	670.3	−92.7	−.6
IV	565.5	685.4	165.0	520.3	−119.9	−190.1	70.2	0	556.8	661.1	−104.3	−8.6
1985: I	573.2	669.8	144.1	525.6	−96.6	−162.6	65.6	0	566.8	650.6	−83.8	−6.4
II	566.8	722.4	183.6	538.8	−155.6	−214.8	59.2	0	555.0	667.1	−112.0	−11.7
III	541.7	679.6	119.6	560.1	−138.0	197.5	59.5	0	536.2	657.4	−121.2	−5.5
IV	524.1	679.2	125.8	553.4	−155.1	−217.6	62.5	0	525.7	669.5	−143.8	1.6
1986: I	583.2	708.3	145.6	562.7	−125.1	−195.0	69.9	0	579.6	708.3	−128.6	−3.6
II	539.7	713.0	153.1	560.0	−173.3	−232.2	58.9	0	544.3	687.3	−143.0	4.6
III	517.2	650.5	84.1	566.4	−133.3	−197.4	64.0	0	527.5	675.8	−148.3	10.3
IV ᵖ			82.3					0	519.7	674.5	−154.8	

[1] Undistributed corporate profits with inventory valuation and capital consumption adjustments, corporate and noncorporate capital consumption allowances with capital consumption adjustment, and private wage accruals less disbursements.

[2] Allocations of special drawing rights (SDRs), except as noted in footnote 4.

[3] Net exports of goods and services less net transfers to foreigners and interest paid by government to foreigners plus capital grants received by the United States, net.

[4] In February 1974, the U.S. Government paid to India $2,010 million in rupees under provisions of the Agricultural Trade Development and Assistance Act. This transaction is being treated as capital grants paid to foreigners, i.e., a −$2.0 billion entry in capital grants received by the United States, net.

Source: Department of Commerce, Bureau of Economic Analysis.

Table B–28.—*Saving by individuals, 1946–86*[1]

[Billions of dollars; quarterly data at seasonally adjusted annual rates]

Year or quarter	Total	Increase in financial assets									Net investment in[7]			Less: Net increase in debt		
		Total	Checkable deposits and currency	Time and savings deposits	Money market fund shares	Securities			Insurance and pension reserves[5]	Other financial assets[6]	Owner-occupied homes	Consumer durables	Noncorporate business assets[8]	Mortgage debt on nonfarm homes	Consumer credit	Other debt[8][9]
						Government securities[2]	Corporate equities[3]	Other securities[4]								
1946	25.2	19.0	5.6	6.3	......	−1.5	1.1	−0.9	5.3	3.1	3.8	6.7	2.0	3.6	3.1	−0.4
1947	20.6	13.4	.1	3.4	......	1.6	1.1	−.8	5.4	2.7	7.0	9.4	1.3	4.7	3.7	2.2
1948	25.4	9.4	−2.9	2.2	......	1.3	1.0	.0	5.3	2.5	9.5	10.2	6.9	4.6	3.2	2.8
1949	21.8	10.0	−2.0	2.6	......	1.8	.7	−.4	5.6	1.7	8.7	10.9	2.0	4.4	3.2	2.2
1950	31.9	14.2	2.6	2.4	......	−.1	.7	−.7	6.9	2.4	12.1	14.9	7.2	6.7	4.8	5.0
1951	35.3	19.4	4.6	4.7	......	−.6	1.8	.3	6.3	2.2	12.1	11.4	4.4	6.6	1.6	3.7
1952	31.7	23.6	1.6	7.8	......	2.5	1.6	.0	7.7	2.3	11.7	8.7	1.9	6.2	5.3	2.6
1953	33.1	23.0	1.0	8.1	......	2.5	1.0	.5	7.9	2.2	12.7	10.3	.8	7.6	4.2	1.9
1954	28.6	22.4	2.2	9.1	......	1.0	.8	−.8	7.8	2.3	13.1	7.0	1.7	8.7	1.5	5.5
1955	35.7	28.4	1.2	8.6	......	5.8	1.0	1.0	8.5	2.3	17.3	12.7	2.9	12.2	7.1	6.3
1956	37.8	30.2	1.8	9.4	......	3.9	2.0	1.0	9.5	2.6	16.2	8.8	1.0	11.2	3.9	3.2
1957	36.6	28.4	−.4	11.9	......	2.3	1.5	.8	9.5	2.8	13.8	7.9	2.1	8.9	2.9	3.8
1958	34.9	31.5	3.8	13.9	......	−2.5	1.5	1.0	10.4	3.4	12.8	3.7	2.9	9.5	.5	6.0
1959	39.1	38.1	1.0	11.0	......	10.1	.5	−.2	11.9	3.8	17.0	7.7	4.3	12.8	8.0	7.2
1960	36.9	31.7	1.0	12.0	......	2.2	−.6	2.3	11.5	3.2	15.7	7.3	3.2	11.7	4.4	5.0
1961	36.7	35.1	−.9	18.3	......	1.4	.3	−.2	12.1	4.2	13.5	4.5	4.9	12.2	2.5	6.6
1962	42.1	39.7	−1.2	26.1	......	1.3	−2.1	−.5	12.7	3.4	14.0	8.6	7.0	13.8	6.3	7.3
1963	47.3	46.7	4.2	26.2	......	.6	−2.6	1.3	13.9	3.1	15.5	11.9	9.2	16.6	8.9	10.5
1964	57.3	55.8	5.3	26.1	......	4.8	−.2	.4	16.1	3.3	15.7	15.1	8.7	17.5	9.8	10.9
1965	65.0	58.9	7.6	27.8	......	3.7	−2.1	1.3	16.9	3.8	15.3	20.2	12.4	17.0	10.6	14.2
1966	72.4	57.5	2.4	19.0	......	11.3	−.7	2.4	19.2	4.0	14.5	23.2	9.8	13.8	6.5	12.2
1967	78.5	69.8	9.9	35.3	......	−1.2	−4.7	5.2	18.6	6.7	12.6	21.3	10.7	12.4	5.7	17.8
1968	81.4	75.2	11.1	31.1	......	5.2	−7.5	7.9	19.8	7.8	17.0	26.9	9.9	17.0	11.5	19.2
1969	73.1	65.2	−2.5	9.1	......	25.9	−2.8	10.0	21.5	4.1	17.2	26.2	13.3	18.6	10.9	19.4
1970	88.6	82.4	8.9	43.6	......	−5.4	−1.7	6.9	23.9	6.3	14.6	19.9	13.0	13.4	5.5	22.6
1971	97.3	99.8	12.3	67.7	......	−12.2	−5.5	6.6	27.4	3.4	22.3	25.7	19.5	25.3	14.8	29.9
1972	122.9	134.0	13.6	73.9	......	.9	−9.9	.1	47.8	7.5	29.2	34.8	26.6	38.3	19.8	43.5
1973	140.5	146.1	13.3	63.4	......	18.9	−4.3	9.5	39.1	6.2	33.1	41.2	31.9	44.6	24.0	43.2
1974	139.4	148.0	6.5	56.1	2.4	19.9	−.3	13.0	42.7	7.7	27.9	29.9	14.9	34.8	9.9	36.6
1975	158.5	171.7	5.9	76.8	1.3	18.3	−7.4	−4.7	70.5	11.1	27.5	28.4	7.6	38.2	9.1	29.3
1976	171.4	208.9	16.0	107.6	−.0	6.5	−2.4	8.6	55.2	17.4	41.9	42.9	2.7	59.4	24.2	41.3
1977	183.1	239.4	19.6	105.4	.2	12.6	−7.2	13.6	78.0	17.3	61.0	53.3	15.1	89.7	38.1	57.9
1978	212.2	281.7	22.4	99.2	6.9	33.4	−6.3	9.6	88.5	28.0	77.8	58.8	18.9	108.6	46.7	69.7
1979	220.5	307.7	25.9	74.0	34.4	54.7	−22.9	2.9	106.1	32.7	86.7	54.0	12.4	117.6	42.7	80.1
1980	249.0	333.7	12.8	126.2	29.2	33.6	−6.3	−13.9	118.5	33.5	66.6	31.9	−6.1	96.4	4.5	76.3
1981	301.5	363.7	30.0	66.2	107.5	56.2	−29.0	−12.6	116.0	29.4	59.7	37.4	19.7	75.0	22.6	81.4
1982	330.9	402.3	19.3	126.7	24.7	80.4	2.1	−7.3	127.3	29.1	35.6	37.2	−3.8	49.5	17.7	73.2
1983	312.0	468.3	39.5	198.6	−44.1	98.3	14.8	−8.3	150.2	19.2	67.8	62.7	−7.2	110.4	56.8	112.5
1984	422.3	551.7	19.1	224.6	47.2	139.9	−36.4	−3.9	134.3	26.9	94.6	92.7	19.8	129.3	95.0	112.2
1985	381.2	560.5	45.1	140.0	−2.2	120.1	−.8	60.9	150.5	46.9	98.1	102.9	13.6	149.4	96.6	147.9
1984: I	419.4	503.2	29.9	226.5	44.9	115.8	−16.7	−26.1	109.1	19.8	90.2	87.6	36.4	118.8	83.2	96.0
II	427.5	591.0	26.4	226.5	15.4	169.8	−52.9	−16.9	193.4	29.3	95.1	95.4	16.5	145.6	114.3	110.5
III	429.1	541.0	−14.7	214.6	20.5	178.4	−27.1	25.9	112.9	30.5	97.4	92.1	16.4	121.7	91.2	104.9
IV	413.3	571.7	34.7	230.9	107.9	95.5	−48.8	1.5	121.9	28.0	95.6	95.6	10.1	131.1	91.4	137.2
1985: I	358.5	456.6	−.4	185.5	−12.1	50.5	−14.7	81.0	135.5	31.3	94.6	98.1	19.1	124.7	105.5	79.7
II	434.9	596.7	69.7	127.0	20.4	195.1	−23.1	−13.5	166.4	54.6	96.8	100.1	24.6	139.8	89.2	154.2
III	368.8	533.0	95.9	145.2	−21.2	21.8	7.9	82.3	165.9	35.2	99.6	114.8	14.0	162.4	112.6	117.6
IV	362.6	655.9	15.3	102.4	4.0	213.0	26.5	94.0	134.1	66.5	101.3	98.7	−3.3	170.6	79.2	240.2
1986: I	374.1	434.3	49.4	145.2	27.0	−91.9	133.9	24.4	97.9	48.3	104.2	92.9	25.2	114.7	63.6	104.2
II	428.1	542.4	125.6	78.9	30.9	70.6	50.7	4.8	157.8	23.2	110.5	101.5	30.8	182.1	87.0	88.1
III	314.4	428.4	62.4	125.9	49.8	−4.6	80.5	−121.2	194.9	40.7	112.6	137.4	29.8	200.5	81.1	112.1

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[1] Saving by households, personal trust funds, nonprofit institutions, farms, and other noncorporate business.

[2] Consists of U.S. savings bonds, other U.S. Treasury securities, U.S. Government agency securities and sponsored agency securities, mortgage pool securities, and State and local obligations.

[3] Includes mutual fund shares.

[4] Corporate and foreign bonds and open market paper.

[5] Private life insurance reserves, private insured and noninsured pension reserves, and government insurance and pension reserves.

[6] Consists of security credit, mortgages, accident and health insurance reserves, and nonlife insurance claims for households and of consumer credit, equity in sponsored agencies, and nonlife insurance claims for noncorporate business.

[7] Purchases of physical assets less depreciation.

[8] Includes data for corporate farms.

[9] Other debt consists of security credit, policy loans, and noncorporate business debt.

Source: Board of Governors of the Federal Reserve System.

TABLE B–29.—*Number and median income (in 1985 dollars) of families and persons, and poverty status, by race, selected years, 1960–85*

Year	Families [1]						Persons below poverty level		Median income of persons 14 years old and over with income [2]			
	Number (millions)	Median income	Below poverty level				Number (millions)	Rate	Males		Females	
			Total		Female householder				All persons	Year-round full-time workers	All persons	Year-round full-time workers
			Number (millions)	Rate	Number (millions)	Rate						
ALL RACES												
1960	45.5	$20,415	8.2	18.1	2.0	42.4	39.9	22.2	$14,822	$19,740	$4,582	$11,971
1961	46.4	20,623	8.4	18.1	2.0	42.1	39.6	21.9	15,064	20,363	4,600	12,015
1962	47.1	21,181	8.1	17.2	2.0	42.9	38.6	21.0	15,548	20,721	4,773	12,296
1963	47.5	21,957	7.6	15.9	2.0	40.4	36.4	19.5	15,849	21,329	4,821	12,494
1964	48.0	22,783	7.2	15.0	1.8	36.4	36.1	19.0	16,117	21,793	5,025	12,868
1965	48.5	23,720	6.7	13.9	1.9	38.4	33.2	17.3	17,126	22,496	5,185	13,012
1966 [3]	49.2	24,967	5.8	11.8	1.7	33.1	28.5	14.7	17,588	23,055	5,431	13,345
1967	50.1	25,560	5.7	11.4	1.8	33.3	27.8	14.2	17,892	23,485	5,803	13,526
1968	50.8	26,691	5.0	10.0	1.8	32.3	25.4	12.8	18,491	24,162	6,243	14,125
1969	51.6	27,680	5.0	9.7	1.8	32.7	24.1	12.1	18,865	25,436	6,256	14,898
1970	52.2	27,336	5.3	10.1	2.0	32.5	25.4	12.6	18,479	25,444	6,197	15,071
1971	53.3	27,319	5.3	10.0	2.1	33.9	25.6	12.5	18,336	25,582	6,396	15,143
1972	54.4	28,584	5.1	9.3	2.2	32.7	24.5	11.9	19,157	27,098	6,683	15,565
1973	55.1	29,172	4.8	8.8	2.2	32.2	23.0	11.1	19,502	27,761	6,768	15,706
1974 [3]	55.7	28,145	4.9	8.8	2.3	32.1	23.4	11.2	18,438	26,531	6,723	15,650
1975	56.2	27,421	5.5	9.7	2.4	32.5	25.9	12.3	17,695	25,852	6,766	15,428
1976	56.7	28,267	5.3	9.4	2.5	33.0	25.0	11.8	17,813	26,190	6,758	15,708
1977	57.2	28,419	5.3	9.3	2.6	31.7	24.7	11.6	17,970	26,752	6,996	15,647
1978	57.8	29,087	5.3	9.1	2.7	31.4	24.5	11.4	18,031	26,485	6,708	15,897
1979 [4]	59.6	29,029	5.5	9.2	2.6	30.4	26.1	11.7	17,457	25,905	6,450	15,608
1980	60.3	27,446	6.2	10.3	3.0	32.7	29.3	13.0	16,358	25,031	6,423	15,132
1981	61.0	26,481	6.9	11.2	3.3	34.6	31.8	14.0	15,936	24,475	6,456	14,734
1982	61.4	26,116	7.5	12.2	3.4	36.3	34.4	15.0	15,547	24,134	6,561	15,227
1983 [3]	62.0	26,642	7.6	12.3	3.6	36.0	35.3	15.2	15,830	24,301	6,916	15,644
1984	62.7	27,376	7.3	11.6	3.5	34.5	33.7	14.4	16,157	24,861	7,113	15,972
1985	63.6	27,735	7.2	11.4	3.5	34.0	33.1	14.0	16,311	24,999	7,217	16,252
WHITE												
1970	46.5	28,358	3.7	8.0	1.1	25.0	17.5	9.9	19,423	26,172	6,278	15,337
1971	47.6	28,347	3.8	7.9	1.2	26.5	17.8	9.9	19,223	26,302	6,502	15,318
1972	48.5	29,697	3.4	7.1	1.1	24.3	16.2	9.0	20,093	28,075	6,727	15,871
1973	48.9	30,489	3.2	6.6	1.2	24.5	15.1	8.4	20,463	28,565	6,834	15,972
1974 [3]	49.4	29,249	3.4	6.8	1.3	24.8	15.7	8.6	19,315	27,048	6,800	15,783
1975	49.9	28,518	3.8	7.7	1.4	25.9	17.8	9.7	18,589	26,450	6,836	15,464
1976	50.1	29,361	3.6	7.1	1.4	25.2	16.7	9.1	18,778	26,970	6,814	15,828
1977	50.5	29,717	3.5	7.0	1.4	24.0	16.4	8.9	18,823	27,299	7,103	15,746
1978	50.9	30,287	3.5	6.9	1.4	23.5	16.3	8.7	18,885	26,976	6,789	16,047
1979 [4]	52.2	30,292	3.6	6.9	1.4	22.3	17.2	9.0	18,237	26,653	6,511	15,744
1980	52.7	28,596	4.2	8.0	1.6	25.7	19.7	10.2	17,400	25,745	6,458	15,278
1981	53.3	27,816	4.7	8.8	1.8	27.4	21.6	11.1	16,910	25,050	6,528	14,980
1982	53.4	27,420	5.1	9.6	1.8	27.9	23.5	12.0	16,437	24,777	6,650	15,432
1983 [3]	53.9	27,898	5.2	9.7	1.9	28.3	24.0	12.1	16,654	24,950	7,037	15,853
1984	54.4	28,674	4.9	9.1	1.9	27.1	23.0	11.5	17,055	25,712	7,197	16,131
1985	55.0	29,152	5.0	9.1	2.0	27.4	22.9	11.4	17,111	25,693	7,357	16,482
BLACK												
1970	4.9	17,395	1.5	29.5	.8	54.3	7.5	33.5	11,472	17,828	5,715	12,567
1971	5.2	17,106	1.5	28.8	.9	53.5	7.4	32.5	11,353	17,985	5,698	13,525
1972	5.3	17,650	1.5	29.0	1.0	53.3	7.7	33.3	12,101	18,959	6,285	13,577
1973	5.4	17,596	1.5	28.1	1.0	52.7	7.4	31.4	12,377	19,252	6,168	13,544
1974 [3]	5.5	17,465	1.5	26.9	1.0	52.2	7.2	30.3	11,967	19,378	6,139	14,566
1975	5.6	17,547	1.5	27.1	1.0	50.1	7.5	31.3	11,113	19,684	6,210	14,775
1976	5.8	17,465	1.6	27.9	1.1	52.2	7.6	31.1	11,306	19,317	6,421	14,799
1977	5.8	16,976	1.6	28.2	1.2	51.0	7.7	31.3	11,170	18,821	6,133	14,716
1978	5.9	17,939	1.6	27.5	1.2	50.6	7.6	30.6	11,313	20,661	6,113	14,873
1979 [4]	6.2	17,153	1.7	27.8	1.2	49.4	8.1	31.0	11,289	19,209	5,925	14,426
1980	6.3	16,546	1.8	28.9	1.3	49.4	8.6	32.5	10,456	18,114	5,979	14,250
1981	6.4	15,691	2.0	30.8	1.4	52.9	9.2	34.2	10,055	17,723	5,799	13,529
1982	6.5	15,155	2.2	33.0	1.5	56.2	9.7	35.6	9,850	17,598	5,866	13,793
1983 [3]	6.7	15,722	2.2	32.3	1.5	53.7	9.9	35.7	9,739	17,789	6,013	14,072
1984	6.8	15,982	2.1	30.9	1.5	51.7	9.5	33.8	9,785	17,548	6,384	14,537
1985	6.9	16,786	2.0	28.7	1.5	50.5	8.9	31.3	10,768	17,971	6,277	14,590

[1] The term "family" refers to a group of two or more persons related by blood, marriage, or adoption and residing together; all such persons are considered members of the same family. Beginning 1979, based on householder concept and restricted to primary families.

[2] Beginning 1979, data are for persons 15 years and over.

[3] Based on revised methodology; comparable with succeeding years.

[4] Based on 1980 census population controls; comparable with succeeding years.

Note.—The poverty level is based on the poverty index adopted by a Federal interagency committee in 1969. That index reflected different consumption requirements for families based on size and composition, sex and age of family householder, and farm-nonfarm residence. Minor revisions implemented in 1981 eliminated variations in the poverty thresholds based on two of these variables, farm-nonfarm residence and sex of householder. The poverty thresholds are updated every year to reflect changes in the consumer price index. For further details see "Current Population Reports," Series P–60, No. 152.

Source: Department of Commerce, Bureau of the Census.

TABLE B-30.—*Population by age groups, 1929–86*

[Thousands of persons]

July 1	Total	Age (years)						
		Under 5	5-15	16-19	20-24	25-44	45-64	65 and over
1929	121,767	11,734	26,800	9,127	10,694	35,862	21,076	6,474
1933	125,579	10,612	26,897	9,302	11,152	37,319	22,933	7,363
1939	130,880	10,418	25,179	9,822	11,519	39,354	25,823	8,764
1940	132,122	10,579	24,811	9,895	11,690	39,868	26,249	9,031
1941	133,402	10,850	24,516	9,840	11,807	40,383	26,718	9,288
1942	134,860	11,301	24,231	9,730	11,955	40,861	27,196	9,584
1943	136,739	12,016	24,093	9,607	12,064	41,420	27,671	9,867
1944	138,397	12,524	23,949	9,561	12,062	42,016	28,138	10,147
1945	139,928	12,979	23,907	9,361	12,036	42,521	28,630	10,494
1946	141,389	13,244	24,103	9,119	12,004	43,027	29,064	10,828
1947	144,126	14,406	24,468	9,097	11,814	43,657	29,498	11,185
1948	146,631	14,919	25,209	8,952	11,794	44,288	29,931	11,538
1949	149,188	15,607	25,852	8,788	11,700	44,916	30,405	11,921
1950	152,271	16,410	26,721	8,542	11,680	45,672	30,849	12,397
1951	154,878	17,333	27,279	8,446	11,552	46,103	31,362	12,803
1952	157,553	17,312	28,894	8,414	11,350	46,495	31,884	13,203
1953	160,184	17,638	30,227	8,460	11,062	46,786	32,394	13,617
1954	163,026	18,057	31,480	8,637	10,832	47,001	32,942	14,076
1955	165,931	18,566	32,682	8,744	10,714	47,194	33,506	14,525
1956	168,903	19,003	33,994	8,916	10,616	47,379	34,057	14,938
1957	171,984	19,494	35,272	9,195	10,603	47,440	34,591	15,388
1958	174,882	19,887	36,445	9,543	10,756	47,337	35,109	15,806
1959	177,830	20,175	37,368	10,215	10,969	47,192	35,663	16,248
1960	180,671	20,341	38,494	10,683	11,134	47,140	36,203	16,675
1961	183,691	20,522	39,765	11,025	11,483	47,084	36,722	17,089
1962	186,538	20,469	41,205	11,180	11,959	47,013	37,255	17,457
1963	189,242	20,342	41,626	12,007	12,714	46,994	37,782	17,778
1964	191,889	20,165	42,297	12,736	13,269	46,958	38,338	18,127
1965	194,303	19,824	42,938	13,516	13,746	46,912	38,916	18,451
1966	196,560	19,208	43,702	14,311	14,050	47,001	39,534	18,755
1967	198,712	18,563	44,244	14,200	15,248	47,194	40,193	19,071
1968	200,706	17,913	44,622	14,452	15,786	47,721	40,846	19,365
1969	202,677	17,376	44,840	14,800	16,480	48,064	41,437	19,680
1970	205,052	17,166	44,816	15,289	17,202	48,473	41,999	20,107
1971	207,661	17,244	44,591	15,688	18,159	48,936	42,482	20,561
1972	209,896	17,101	44,203	16,039	18,153	50,482	42,898	21,020
1973	211,909	16,851	43,582	16,446	18,521	51,749	43,235	21,525
1974	213,854	16,487	42,989	16,769	18,975	53,051	43,522	22,061
1975	215,973	16,121	42,508	17,017	19,527	54,302	43,801	22,696
1976	218,035	15,617	42,099	17,194	19,986	55,852	44,008	23,278
1977	220,239	15,564	41,298	17,276	20,499	57,561	44,150	23,892
1978	222,585	15,735	40,428	17,288	20,946	59,400	44,286	24,502
1979	225,055	16,063	39,552	17,242	21,297	61,379	44,390	25,134
1980	227,757	16,458	38,844	17,160	21,584	63,494	44,515	25,704
1981	230,138	16,931	38,190	16,770	21,821	65,619	44,569	26,236
1982	232,520	17,298	37,876	16,255	21,807	67,856	44,601	26,827
1983	234,799	17,650	37,668	15,704	21,700	69,970	44,678	27,428
1984	237,019	17,859	37,657	15,141	21,535	72,046	44,815	27,967
1985	239,283	18,037	37,694	14,818	21,207	74,066	44,931	28,530
1986	241,489	....	....	....	....	....	....	....

Note.—Includes Armed Forces overseas beginning 1940. Includes Alaska and Hawaii beginning 1950.

Source: Department of Commerce, Bureau of the Census.

TABLE B-31.—*Population and the labor force, 1929–86*

[Monthly data seasonally adjusted, except as noted]

Period	Civilian noninstitutional population[1]	Resident Armed Forces[1]	Labor force including resident Armed Forces	Employment including resident Armed Forces	Civilian labor force					Unemployment rate		Labor force participation rate	
					Total	Employment			Unemployment	All workers[2]	Civilian workers	Total[3]	Civilian[4]
						Total	Agricultural	Nonagricultural					
	Thousands of persons 14 years of age and over									Percent			
1929	...	...	...	...	49,180	47,630	10,450	37,180	1,550	...	3.2	...	...
1933	...	...	...	...	51,590	38,760	10,090	28,670	12,830	...	24.9	...	...
1939	...	...	...	...	55,230	45,750	9,610	36,140	9,480	...	17.2	...	...
1940	99,840	...	...	...	55,640	47,520	9,540	37,980	8,120	...	14.6	...	55.7
1941	99,900	...	...	...	55,910	50,350	9,100	41,250	5,560	...	9.9	...	56.0
1942	98,640	...	...	...	56,410	53,750	9,250	44,500	2,660	...	4.7	...	57.2
1943	94,640	...	...	...	55,540	54,470	9,080	45,390	1,070	...	1.9	...	58.7
1944	93,220	...	...	...	54,630	53,960	8,950	45,010	670	...	1.2	...	58.6
1945	94,090	...	...	...	53,860	52,820	8,580	44,240	1,040	...	1.9	...	57.2
1946	103,070	...	...	...	57,520	55,250	8,320	46,930	2,270	...	3.9	...	55.8
1947	106,018	...	...	...	60,168	57,812	8,256	49,557	2,356	...	3.9	...	56.8
	Thousands of persons 16 years of age and over												
1947	101,827	...	...	...	59,350	57,038	7,890	49,148	2,311	...	3.9	...	58.3
1948	103,068	...	...	...	60,621	58,343	7,629	50,714	2,276	...	3.8	...	58.8
1949	103,994	...	...	...	61,286	57,651	7,658	49,993	3,637	...	5.9	...	58.9
1950	104,995	1,169	63,377	60,087	62,208	58,918	7,160	51,758	3,288	5.2	5.3	59.7	59.2
1951	104,621	2,143	64,160	62,104	62,017	59,961	6,726	53,235	2,055	3.2	3.3	60.1	59.2
1952	105,231	2,386	64,524	62,636	62,138	60,250	6,500	53,749	1,883	2.9	3.0	60.0	59.0
1953[5]	107,056	2,231	65,246	63,410	63,015	61,179	6,260	54,919	1,834	2.8	2.9	59.7	58.9
1954	108,321	2,142	65,785	62,251	63,643	60,109	6,205	53,904	3,532	5.4	5.5	59.6	58.8
1955	109,683	2,064	67,087	64,234	65,023	62,170	6,450	55,722	2,852	4.3	4.4	60.0	59.3
1956	110,954	1,965	68,517	65,764	66,552	63,799	6,283	57,514	2,750	4.0	4.1	60.7	60.0
1957	112,265	1,948	68,877	66,019	66,929	64,071	5,947	58,123	2,859	4.2	4.3	60.3	59.6
1958	113,727	1,847	69,486	64,883	67,639	63,036	5,586	57,450	4,602	6.6	6.8	60.1	59.5
1959	115,329	1,788	70,157	66,418	68,369	64,630	5,565	59,065	3,740	5.3	5.5	59.9	59.3
1960[5]	117,245	1,861	71,489	67,639	69,628	65,778	5,458	60,318	3,852	5.4	5.5	60.0	59.4
1961	118,771	1,900	72,359	67,646	70,459	65,746	5,200	60,546	4,714	6.5	6.7	60.0	59.3
1962[5]	120,153	2,061	72,675	68,763	70,614	66,702	4,944	61,759	3,911	5.4	5.5	59.5	58.8
1963	122,416	2,006	73,839	69,768	71,833	67,762	4,687	63,076	4,070	5.5	5.7	59.3	58.7
1964	124,485	2,018	75,109	71,323	73,091	69,305	4,523	64,782	3,786	5.0	5.2	59.4	58.7
1965	126,513	1,946	76,401	73,034	74,455	71,088	4,361	66,726	3,366	4.4	4.5	59.5	58.9
1966	128,058	2,122	77,892	75,017	75,770	72,895	3,979	68,915	2,875	3.7	3.8	59.8	59.2
1967	129,874	2,218	79,565	76,590	77,347	74,372	3,844	70,527	2,975	3.7	3.8	60.2	59.6
1968	132,028	2,253	80,990	78,173	78,737	75,920	3,817	72,103	2,817	3.5	3.6	60.3	59.6
1969	134,335	2,238	82,972	80,140	80,734	77,902	3,606	74,296	2,832	3.4	3.5	60.8	60.1
1970	137,085	2,118	84,889	80,796	82,771	78,678	3,463	75,215	4,093	4.8	4.9	61.0	60.4
1971	140,216	1,973	86,355	81,340	84,382	79,367	3,394	75,972	5,016	5.8	5.9	60.7	60.2
1972[5]	144,126	1,813	88,847	83,966	87,034	82,153	3,484	78,669	4,882	5.5	5.6	60.9	60.4
1973[5]	147,096	1,774	91,203	86,838	89,429	85,064	3,470	81,594	4,365	4.8	4.9	61.3	60.8
1974	150,120	1,721	93,670	88,515	91,949	86,794	3,515	83,279	5,156	5.5	5.6	61.7	61.3
1975	153,153	1,678	95,453	87,524	93,775	85,846	3,408	82,438	7,929	8.3	8.5	61.6	61.2
1976	156,150	1,668	97,826	90,420	96,158	88,752	3,331	85,421	7,406	7.6	7.7	62.0	61.6
1977	159,033	1,656	100,665	93,673	99,009	92,017	3,283	88,734	6,991	6.9	7.1	62.6	62.3
1978[5]	161,910	1,631	103,882	97,679	102,251	96,048	3,387	92,661	6,202	6.0	6.1	63.5	63.2
1979	164,863	1,597	106,559	100,421	104,962	98,824	3,347	95,477	6,137	5.8	5.8	64.0	63.7
1980	167,745	1,604	108,544	100,907	106,940	99,303	3,364	95,938	7,637	7.0	7.1	64.1	63.8
1981	170,130	1,645	110,315	102,042	108,670	100,397	3,368	97,030	8,273	7.5	7.6	64.2	63.9
1982	172,271	1,668	111,872	101,194	110,204	99,526	3,401	96,125	10,678	9.5	9.7	64.3	64.0
1983	174,215	1,676	113,226	102,510	111,550	100,834	3,383	97,450	10,717	9.5	9.6	64.4	64.0
1984	176,383	1,697	115,241	106,702	113,544	105,005	3,321	101,685	8,539	7.4	7.5	64.7	64.4
1985	178,206	1,706	117,167	108,856	115,461	107,150	3,179	103,971	8,312	7.1	7.2	65.1	64.8
1986[5]	180,587	1,706	119,540	111,303	117,834	109,597	3,163	106,434	8,237	6.9	7.0	65.6	65.3
1982: Jan	171,335	1,656	110,745	101,348	109,089	99,692	3,393	96,299	9,397	8.5	8.6	64.0	63.7
Feb	171,489	1,664	111,131	101,426	109,467	99,762	3,375	96,387	9,705	8.7	8.9	64.2	63.8
Mar	171,667	1,671	111,238	101,343	109,567	99,672	3,372	96,300	9,895	8.9	9.0	64.2	63.8
Apr	171,844	1,668	111,488	101,244	109,820	99,576	3,351	96,225	10,244	9.2	9.3	64.3	63.9
May	172,026	1,665	112,116	101,781	110,451	100,116	3,434	96,682	10,335	9.2	9.4	64.5	64.2
June	172,190	1,664	111,745	101,207	110,081	99,543	3,331	96,212	10,538	9.4	9.6	64.3	63.9
July	172,364	1,674	112,016	101,167	110,342	99,493	3,402	96,091	10,849	9.7	9.8	64.4	64.0
Aug	172,511	1,689	112,203	101,322	110,514	99,633	3,408	96,225	10,881	9.7	9.8	64.4	64.1
Sept	172,690	1,670	112,391	101,174	110,721	99,504	3,385	96,119	11,217	10.0	10.1	64.5	64.1
Oct	172,881	1,668	112,412	100,883	110,744	99,215	3,489	95,726	11,529	10.3	10.4	64.4	64.1
Nov	173,058	1,660	112,710	100,772	111,050	99,112	3,510	95,602	11,938	10.6	10.8	64.5	64.2
Dec	173,199	1,665	112,748	100,697	111,083	99,032	3,414	95,618	12,051	10.7	10.8	64.5	64.1

See next page for continuation of table.

TABLE B-31.—*Population and the labor force, 1929–86—Continued*

[Monthly data seasonally adjusted, except as noted]

Period	Civilian noninstitutional population [1]	Resident Armed Forces [1]	Labor force including resident Armed Forces	Employment including resident Armed Forces	Civilian labor force					Unemployment rate		Labor force participation rate	
					Total	Employment			Unemployment	All workers [2]	Civilian workers	Total [3]	Civilian [4]
						Total	Agricultural	Nonagricultural					
	Thousands of persons 16 years of age and over									Percent			
1983: Jan	173,354	1,667	112,361	100,835	110,694	99,168	3,436	95,732	11,526	10.3	10.4	64.2	63.9
Feb	173,505	1,664	112,318	100,776	110,654	99,112	3,385	95,727	11,542	10.3	10.4	64.1	63.8
Mar	173,656	1,664	112,256	100,853	110,592	99,189	3,369	95,820	11,403	10.2	10.3	64.0	63.7
Apr	173,794	1,671	112,512	101,244	110,841	99,573	3,343	96,230	11,268	10.0	10.2	64.1	63.8
May	173,953	1,669	112,492	101,340	110,823	99,671	3,342	96,329	11,152	9.9	10.1	64.1	63.7
June	174,125	1,668	113,489	102,241	111,821	100,573	3,461	97,112	11,248	9.9	10.1	64.6	64.2
July	174,306	1,664	113,410	102,880	111,746	101,216	3,481	97,735	10,530	9.3	9.4	64.4	64.1
Aug	174,440	1,682	113,878	103,279	112,196	101,597	3,493	98,104	10,599	9.3	9.4	64.7	64.3
Sept	174,602	1,695	113,995	103,719	112,300	102,024	3,345	98,679	10,276	9.0	9.2	64.7	64.3
Oct	174,779	1,695	113,621	103,744	111,926	102,049	3,306	98,743	9,877	8.7	8.8	64.4	64.0
Nov	174,951	1,685	113,905	104,405	112,220	102,720	3,278	99,442	9,500	8.3	8.5	64.5	64.1
Dec	175,121	1,688	114,037	104,668	112,349	102,980	3,330	99,650	9,369	8.2	8.3	64.5	64.2
1984: Jan	175,533	1,686	113,923	104,885	112,237	103,199	3,286	99,913	9,038	7.9	8.1	64.3	63.9
Feb	175,679	1,684	114,355	105,540	112,671	103,856	3,362	100,494	8,815	7.7	7.8	64.5	64.1
Mar	175,824	1,686	114,400	105,650	112,714	103,964	3,252	100,712	8,750	7.6	7.8	64.4	64.1
Apr	175,969	1,693	114,816	106,067	113,123	104,374	3,316	101,058	8,749	7.6	7.7	64.6	64.3
May	176,123	1,690	115,365	106,909	113,675	105,219	3,347	101,872	8,456	7.3	7.4	64.9	64.5
June	176,284	1,690	115,447	107,235	113,757	105,545	3,373	102,172	8,212	7.1	7.2	64.9	64.5
July	176,440	1,698	115,630	107,144	113,932	105,446	3,337	102,109	8,486	7.3	7.4	64.9	64.6
Aug	176,583	1,712	115,369	106,876	113,657	105,164	3,276	101,888	8,493	7.4	7.5	64.7	64.4
Sept	176,763	1,720	115,544	107,188	113,824	105,468	3,379	102,089	8,356	7.2	7.3	64.7	64.4
Oct	176,956	1,705	115,723	107,351	114,018	105,646	3,203	102,443	8,372	7.2	7.3	64.8	64.4
Nov	177,135	1,699	115,873	107,666	114,174	105,967	3,380	102,587	8,207	7.1	7.2	64.8	64.5
Dec	177,306	1,698	116,283	107,898	114,585	106,200	3,386	102,814	8,385	7.2	7.3	65.0	64.6
1985: Jan	177,384	1,697	116,494	107,988	114,797	106,291	3,312	102,979	8,506	7.3	7.4	65.1	64.7
Feb	177,516	1,703	116,673	108,308	114,970	106,605	3,336	103,269	8,365	7.2	7.3	65.1	64.8
Mar	177,667	1,701	117,017	108,666	115,316	106,965	3,289	103,676	8,351	7.1	7.2	65.2	64.9
Apr	177,799	1,702	117,015	108,651	115,313	106,949	3,337	103,612	8,364	7.1	7.3	65.2	64.9
May	177,944	1,705	116,991	108,700	115,286	106,995	3,276	103,719	8,291	7.1	7.2	65.1	64.8
June	178,096	1,702	116,628	108,243	114,926	106,541	3,138	103,403	8,385	7.2	7.3	64.9	64.5
July	178,263	1,704	116,984	108,546	115,280	106,842	3,131	103,711	8,438	7.2	7.3	65.0	64.7
Aug	178,405	1,726	117,003	108,862	115,277	107,136	3,106	104,030	8,141	7.0	7.1	65.0	64.6
Sept	178,572	1,732	117,576	109,334	115,844	107,602	3,044	104,558	8,242	7.0	7.1	65.2	64.9
Oct	178,770	1,700	117,780	109,492	116,080	107,792	3,072	104,720	8,288	7.0	7.1	65.3	64.9
Nov	178,940	1,702	117,851	109,680	116,149	107,978	3,055	104,923	8,171	6.9	7.0	65.2	64.9
Dec	179,112	1,698	118,031	109,847	116,333	108,149	3,151	104,998	8,184	6.9	7.0	65.3	64.9
1986: Jan [5]	179,670	1,691	118,485	110,583	116,794	108,892	3,280	105,612	7,902	6.7	6.8	65.3	65.0
Feb	179,821	1,691	118,733	110,248	117,042	108,557	3,105	105,452	8,485	7.1	7.2	65.4	65.1
Mar	179,985	1,693	118,880	110,500	117,187	108,807	3,252	105,555	8,380	7.0	7.2	65.4	65.1
Apr	180,148	1,695	118,987	110,664	117,292	108,969	3,199	105,770	8,323	7.0	7.1	65.4	65.1
May	180,311	1,687	119,274	110,852	117,587	109,165	3,151	106,014	8,422	7.1	7.2	65.5	65.2
June	180,503	1,680	119,685	111,293	118,005	109,613	3,164	106,449	8,392	7.0	7.1	65.7	65.4
July	180,682	1,672	119,789	111,559	118,117	109,887	3,124	106,763	8,230	6.9	7.0	65.7	65.4
Aug	180,8[illegible]	1,697	119,821	111,764	118,124	110,067	3,057	107,010	8,057	6.7	6.8	65.6	65.3
Sept	180,997	1,716	119,988	111,703	118,272	109,987	3,142	106,845	8,285	6.9	7.0	65.7	65.3
Oct	181,186	1,749	120,163	111,941	118,414	110,192	3,162	107,030	8,222	6.8	6.9	65.7	65.4
Nov	181,363	1,751	120,426	112,183	118,675	110,432	3,215	107,217	8,243	6.8	6.9	65.8	65.4
Dec	181,547	1,750	120,336	112,387	118,586	110,637	3,161	107,476	7,949	6.6	6.7	65.7	65.3

[1] Not seasonally adjusted.

[2] Unemployed as percent of labor force including resident Armed Forces.

[3] Labor force including resident Armed Forces as percent of noninstitutional population including resident Armed Forces.

[4] Civilian labor force as percent of civilian noninstitutional population.

[5] Not strictly comparable with earlier data due to population adjustments as follows: Beginning 1953, introduction of 1950 census data added about 600,000 to population and 350,000 to labor force, total employment, and agricultural employment. Beginning 1960, inclusion of Alaska and Hawaii added about 500,000 to population, 300,000 to labor force, and 240,000 to nonagricultural employment. Beginning 1962, introduction of 1960 census data reduced population by about 50,000 and labor force and employment by 200,000. Beginning 1972, introduction of 1970 census data added about 800,000 to civilian noninstitutional population and 333,000 to labor force and employment. A subsequent adjustment based on 1970 census in March 1973 added 60,000 to labor force and to employment. Beginning 1978, changes in sampling and estimation procedures introduced into the household survey added about 250,000 to labor force and to employment. Unemployment levels and rates were not significantly affected. Beginning 1986, the introduction of revised population controls added about 400,000 to the civilian population and labor force and 350,000 to civilian employment. Unemployment levels and rates were not significantly affected.

Note.—Labor force data in Tables B-31 through B-38 are based on household interviews and relate to the calendar week including the 12th of the month. For definitions of terms, area samples used, historical comparability of the data, comparability with other series, etc., see "Employment and Earnings."

Source: Department of Labor, Bureau of Labor Statistics.

TABLE B-32.—*Civilian employment and unemployment by sex and age, 1947–86*

[Thousands of persons 16 years of age and over; monthly data seasonally adjusted]

Year or month	Civilian employment							Unemployment						
	Total	Males			Females			Total	Males			Females		
		Total	16–19 years	20 years and over	Total	16–19 years	20 years and over		Total	16–19 years	20 years and over	Total	16–19 years	20 years and over
1947	57,038	40,995	2,218	38,776	16,045	1,691	14,354	2,311	1,692	270	1,422	619	144	475
1948	58,343	41,725	2,344	39,382	16,617	1,682	14,936	2,276	1,559	256	1,305	717	153	564
1949	57,651	40,925	2,124	38,803	16,723	1,588	15,137	3.637	2,572	353	2,219	1,065	223	841
1950	58,918	41,578	2,186	39,394	17,340	1,517	15,824	3,288	2,239	318	1,922	1,049	195	854
1951	59,961	41,780	2,156	39,626	18,181	1,611	16,570	2,055	1,221	191	1,029	834	145	689
1952	60,250	41,682	2,107	39,578	18,568	1,612	16,958	1,883	1,185	205	980	698	140	559
1953 [1]	61,179	42,430	2,136	40,296	18,749	1,584	17,164	1,834	1,202	184	1,019	632	123	510
1954	60,109	41,619	1,985	39,634	18,490	1,490	17,000	3,532	2,344	310	2,035	1,188	191	997
1955	62,170	42,621	2,095	40,526	19,551	1,547	18,002	2,852	1,854	274	1,580	998	176	823
1956	63,799	43,379	2,164	41,216	20,419	1,654	18,767	2,750	1,711	269	1,442	1,039	209	832
1957	64,071	43,357	2,115	41,239	20,714	1,663	19,052	2,859	1,841	300	1,541	1,018	197	821
1958	63,036	42,423	2,012	40,411	20,613	1,570	19,043	4,602	3,098	416	2,681	1,504	262	1,242
1959	64,630	43,466	2,198	41,267	21,164	1,640	19,524	3,740	2,420	398	2,022	1,320	256	1,063
1960 [1]	65,778	43,904	2,361	41,543	21,874	1,768	20,105	3,852	2,486	426	2,060	1,366	286	1,080
1961	65,746	43,656	2,315	41,342	22,090	1,793	20,296	4,714	2,997	479	2,518	1,717	349	1,368
1962 [1]	66,702	44,177	2,362	41,815	22,525	1,833	20,693	3,911	2,423	408	2,016	1,488	313	1,175
1963	67,762	44,657	2,406	42,251	23,105	1,849	21,257	4.070	2,472	501	1,971	1,598	383	1,216
1964	69,305	45,474	2,587	42,886	23,831	1,929	21,903	3,786	2,205	487	1,718	1,581	385	1,195
1965	71,088	46,340	2,918	43,422	24,748	2,118	22,630	3,366	1,914	479	1,435	1,452	395	1,056
1966	72,895	46,919	3,253	43,668	25,976	2,468	23,510	2,875	1,551	432	1,120	1,324	405	921
1967	74,372	47,479	3,186	44,294	26,893	2,496	24,397	2,975	1,508	448	1,060	1,468	391	1,078
1968	75,920	48,114	3,255	44,859	27,807	2,526	25,281	2,817	1,419	426	993	1,397	412	985
1969	77,902	48,818	3,430	45,388	29,084	2,687	26,397	2,832	1,403	440	963	1,429	413	1,015
1970	78,678	48,990	3,409	45,581	29,688	2,735	26,952	4,093	2,238	599	1,638	1,855	506	1,349
1971	79,367	49,390	3,478	45,912	29,976	2,730	27,246	5,016	2,789	693	2,097	2,227	568	1,658
1972 [1]	82,153	50,896	3,765	47,130	31,257	2,980	28,276	4,882	2,659	711	1,948	2,222	598	1,625
1973 [1]	85,064	52,349	4.039	48,310	32,715	3,231	29,484	4,365	2,275	653	1,624	2,089	583	1,507
1974	86,794	53,024	4,103	48,922	33,769	3,345	30,424	5,156	2,714	757	1,957	2,441	665	1,777
1975	85,846	51,857	3,839	48,018	33,989	3,263	30,726	7,929	4,442	966	3,476	3,486	802	2,684
1976	88,752	53,138	3,947	49,190	35,615	3,389	32,226	7,406	4,036	939	3,098	3,369	780	2,588
1977	92,017	54,728	4,174	50,555	37,289	3,514	33,775	6,991	3,667	874	2,794	3,324	789	2,535
1978 [1]	96,048	56,479	4,336	52,143	39,569	3,734	35,836	6,202	3,142	813	2,328	3,061	769	2,292
1979	98,824	57,607	4,300	53.308	41,217	3,783	37,434	6,137	3,120	811	2,308	3,018	743	2,276
1980	99,303	57,186	4,085	53,101	42,117	3,625	38,492	7,637	4,267	913	3,353	3,370	755	2,615
1981	100,397	57,397	3,815	53,582	43,000	3,411	39,590	8,273	4,577	962	3,615	3,696	800	2,895
1982	99,526	56,271	3,379	52,891	43,256	3,170	40,086	10,678	6,179	1,090	5,089	4,499	886	3,613
1983	100,834	56,787	3,300	53,487	44,047	3,043	41,004	10,717	6,260	1,003	5,257	4,457	825	3,632
1984	105,005	59,091	3,322	55,769	45,915	3,122	42,793	8,539	4,744	812	3,932	3,794	687	3,107
1985	107,150	59,891	3,328	56,562	47,259	3,105	44,154	8,312	4,521	806	3,715	3,791	661	3,129
1986 [1]	109,597	60,892	3,323	57,569	48.706	3,149	45,556	8,237	4,530	779	3,751	3,707	675	3,032
1985: Jan	106,291	59,570	3,417	56,153	46,721	3,136	43,585	8,506	4,626	820	3,806	3,880	697	3,183
Feb	106,605	59,590	3,371	56,219	47,015	3,213	43,802	8,365	4,578	816	3,762	3,787	663	3,124
Mar	106,965	59,789	3,420	56,369	47,176	3,154	44,022	8,351	4,512	784	3,728	3,839	691	3,148
Apr	106,949	59,817	3,431	56,386	47,132	3,123	44,009	8,364	4,563	772	3,791	3,801	630	3,171
May	106,995	59,951	3,385	56,566	47,044	3,109	43,935	8,291	4,427	798	3,629	3,864	685	3,179
June	106,541	59,629	3,265	56,354	46,912	2,929	43,983	8,385	4,614	767	3,847	3,771	635	3,136
July	106,842	59,761	3,310	56,451	47,081	3,095	43,986	8,438	4,598	865	3,733	3,840	707	3,133
Aug	107,136	59,949	3,295	56,654	47,187	3,067	44,120	8,141	4,429	798	3,631	3,712	575	3,137
Sept	107,602	60,116	3,287	56,829	47,486	3,128	44,358	8,242	4,432	772	3,660	3,810	628	3,182
Oct	107,792	60,153	3,237	56,916	47,639	3,088	44,551	8,288	4,570	897	3,673	3,718	680	3,038
Nov	107,978	60,207	3,265	56,942	47,771	3,160	44,611	8,171	4,455	791	3,664	3,716	653	3,063
Dec	108,149	60,213	3,285	56,928	47,936	3,093	44,843	8.184	4,411	794	3,617	3,773	700	3,073
1986: Jan [1]	108,892	60,853	3,254	57,599	48,039	3,087	44,952	7,902	4,274	730	3,544	3,628	683	2,945
Feb	108,557	60,603	3,307	57,296	47,954	3,134	44,820	8,485	4,595	799	3,796	3,890	701	3,189
Mar	108,807	60,681	3,293	57,388	48,126	3,192	44,934	8,380	4,572	783	3,789	3,808	677	3,131
Apr	108,969	60,712	3,320	57,392	48,257	3,163	45,094	8,323	4,517	829	3,688	3,806	719	3.087
May	109,165	60,668	3,330	57,338	48,497	3,162	45,335	8,422	4,653	833	3,820	3,769	671	3,098
June	109,613	60,793	3,271	57,522	48,820	3,163	45,657	8,392	4,619	811	3,808	3,773	691	3,082
July	109,887	60,884	3,340	57,544	49,003	3,134	45,869	8,230	4,566	755	3,811	3,664	654	3,010
Aug	110,067	60,942	3,357	57,585	49,125	3,169	45,956	8,057	4,428	794	3,634	3,629	635	2,994
Sept	109,987	60,968	3,361	57,607	49,019	3,114	45,905	8,285	4,600	795	3,805	3,685	670	3,015
Oct	110,192	60,975	3,380	57,595	49,217	3,197	46,020	8,222	4,565	751	3,814	3,657	663	2,994
Nov	110,432	61,241	3,358	57,883	49,191	3,124	46,067	8,243	4,574	754	3,820	3,669	693	2,976
Dec	110,637	61,393	3,292	58,101	49,244	3,186	46,058	7,949	4,439	714	3,725	3,510	645	2,865

[1] See footnote 5, Table B-31.

Note.—See Note, Table B-31.

Source: Department of Labor, Bureau of Labor Statistics.

TABLE B-33.—*Unemployment by duration and reason, 1947–86*

[Monthly data seasonally adjusted [1]]

Year or month	Unemployment	Duration of unemployment						Reason for unemployment			
		Less than 5 weeks	5–14 weeks	15–26 weeks	27 weeks and over	Average (mean) duration in weeks	Median duration in weeks	Job losers	Job leavers	Reentrants	New entrants
	Thousands of persons 16 years of age and over							Thousands of persons 16 years of age and over			
1947	2,311	1,210	704	234	164	......	......	......	......	......	......
1948	2,276	1,300	669	193	116	8.6	......	......	......	......	......
1949	3,637	1,756	1,194	428	256	10.0	......	......	......	......	......
1950	3,288	1,450	1,055	425	357	12.1	......	......	......	......	......
1951	2,055	1,177	574	166	137	9.7	......	......	......	......	......
1952	1,883	1,135	516	148	84	8.4	......	......	......	......	......
1953	1,834	1,142	482	132	78	8.0	......	......	......	......	......
1954	3,532	1,605	1,116	495	317	11.8	......	......	......	......	......
1955	2,852	1,335	815	366	336	13.0	......	......	......	......	......
1956	2,750	1,412	805	301	232	11.3	......	......	......	......	......
1957	2,859	1,408	891	321	239	10.5	......	......	......	......	......
1958	4,602	1,753	1,396	785	667	13.9	......	......	......	......	......
1959	3,740	1,585	1,114	469	571	14.4	......	......	......	......	......
1960	3,852	1,719	1,176	503	454	12.8	......	......	......	......	......
1961	4,714	1,806	1,376	728	804	15.6	......	......	......	......	......
1962	3,911	1,663	1,134	534	585	14.7	......	......	......	......	......
1963	4,070	1,751	1,231	535	553	14.0	......	......	......	......	......
1964	3,786	1,697	1,117	491	482	13.3	......	......	......	......	......
1965	3,366	1,628	983	404	351	11.8	......	......	......	......	......
1966	2,875	1,573	779	287	239	10.4	......	......	......	......	......
1967	2,975	1,634	893	271	177	8.7	......	1,229	438	945	396
1968	2,817	1,594	810	256	156	8.4	4.5	1,070	431	909	407
1969	2,832	1,629	827	242	133	7.8	4.4	1,017	436	965	413
1970	4,093	2,139	1,290	428	235	8.6	4.9	1,811	550	1,228	504
1971	5,016	2,245	1,585	668	519	11.3	6.3	2,323	590	1,472	630
1972	4,882	2,242	1,472	601	566	12.0	6.2	2,108	641	1,456	677
1973	4,365	2,224	1,314	483	343	10.0	5.2	1,694	683	1,340	649
1974	5,156	2,604	1,597	574	381	9.8	5.2	2,242	768	1,463	681
1975	7,929	2,940	2,484	1,303	1,203	14.2	8.4	4,386	827	1,892	823
1976	7,406	2,844	2,196	1,018	1,348	15.8	8.2	3,679	903	1,928	895
1977	6,991	2,919	2,132	913	1,028	14.3	7.0	3,166	909	1,963	953
1978	6,202	2,865	1,923	766	648	11.9	5.9	2,585	874	1,857	885
1979	6,137	2,950	1,946	706	535	10.8	5.4	2,635	880	1,806	817
1980	7,637	3,295	2,470	1,052	820	11.9	6.5	3,947	891	1,927	872
1981	8,273	3,449	2,539	1,122	1,162	13.7	6.9	4,267	923	2,102	981
1982	10,678	3,883	3,311	1,708	1,776	15.6	8.7	6,268	840	2,384	1,185
1983	10,717	3,570	2,937	1,652	2,559	20.0	10.1	6,258	830	2,412	1,216
1984	8,539	3,350	2,451	1,104	1,634	18.2	7.9	4,421	823	2,184	1,110
1985	8,312	3,498	2,509	1,025	1,280	15.6	6.8	4,139	877	2,256	1,039
1986	8,237	3,448	2,557	1,045	1,187	15.0	6.9	4,033	1,015	2,160	1,029
1985: Jan	8,506	3,689	2,593	958	1,342	15.9	6.8	4,307	864	2,253	1,048
Feb	8,365	3,481	2,484	1,060	1,348	15.9	7.1	4,223	857	2,218	1,038
Mar	8,351	3,514	2,474	1,042	1,345	16.2	7.0	4,144	853	2,303	1,079
Apr	8,364	3,480	2,489	1,013	1,356	16.4	6.9	4,225	826	2,280	1,041
May	8,291	3,534	2,549	1,061	1,235	15.3	6.8	3,910	871	2,367	1,130
June	8,385	3,492	2,492	1,036	1,273	15.5	6.7	4,112	982	2,270	1,010
July	8,438	3,530	2,535	1,061	1,255	15.5	7.0	4,327	887	2,176	1,122
Aug	8,141	3,428	2,524	1,022	1,226	15.3	7.1	4,130	889	2,167	955
Sept	8,242	3,499	2,493	1,025	1,253	15.3	6.8	4,126	857	2,356	915
Oct	8,288	3,431	2,529	1,076	1,200	15.3	7.0	4,035	940	2,212	1,062
Nov	8,171	3,484	2,445	912	1,295	15.6	6.9	4,098	807	2,221	1,038
Dec	8,184	3,417	2,507	1,005	1,204	15.2	6.8	3,996	902	2,251	1,042
1986: Jan	7,902	3,373	2,505	1,003	1,114	15.0	6.8	3,802	977	2,083	1,029
Feb	8,485	3,534	2,615	1,142	1,190	15.2	6.9	4,147	985	2,263	1,073
Mar	8,380	3,536	2,625	1,078	1,165	14.6	6.8	4,210	989	2,196	1,006
Apr	8,323	3,565	2,650	982	1,148	14.7	6.6	4,035	1,071	2,188	1,048
May	8,422	3,610	2,671	1,065	1,167	14.8	6.8	4,214	979	2,200	1,046
June	8,392	3,415	2,650	1,038	1,261	15.2	7.2	4,272	1,009	2,107	1,050
July	8,230	3,399	2,521	1,058	1,192	15.1	7.1	4,063	1,025	2,205	989
Aug	8,057	3,436	2,407	1,068	1,204	15.6	7.1	3,824	990	2,199	1,014
Sept	8,285	3,415	2,524	1,110	1,263	15.5	7.1	4,044	1,041	2,145	1,038
Oct	8,222	3,418	2,563	950	1,218	15.2	7.0	3,984	1,027	2,190	972
Nov	8,243	3,382	2,613	1,045	1,172	14.8	7.0	3,947	1,056	2,119	1,076
Dec	7,949	3,355	2,389	1,023	1,148	15.0	7.1	3,890	1,036	2,019	1,015

[1] Because of independent seasonal adjustment of the various series, detail will not add to totals.

Note.—See footnote 5 and Note, Table B-31.

Source: Department of Labor, Bureau of Labor Statistics.

TABLE B-34.—*Civilian labor force participation rate and employment/population ratio, 1948–86*

[Percent; monthly data seasonally adjusted]

Year or month	Civilian labor force participation rate [1]							Employment/population ratio [2]							
									Civilian						
	Total	Males	Females	Both sexes 16–19 years	White	Black and other	Black	Total	Total	Males	Females	Both sexes 16–19 years	White	Black and other	Black
1948	58.8	86.6	32.7	52.5	......	......	......	......	56.6	83.5	31.3	47.7	......	......	......
1949	58.9	86.4	33.1	52.2	......	......	......	......	55.4	81.3	31.2	45.2	......	......	......
1950	59.2	86.4	33.9	51.8	......	......	......	56.6	56.1	82.0	32.0	45.5	......	......	......
1951	59.2	86.3	34.6	52.2	......	......	......	58.2	57.3	84.0	33.1	47.9	......	......	......
1952	59.0	86.3	34.7	51.3	......	......	......	57.3	57.3	83.9	33.4	46.9	......	......	......
1953	58.9	86.0	34.4	50.2	......	......	......	58.0	57.1	83.6	33.3	46.4	......	......	......
1954	58.8	85.5	34.6	48.3	58.2	64.0	......	56.4	55.5	81.0	32.5	42.3	55.2	58.0	......
1955	59.3	85.4	35.7	48.9	58.7	64.2	......	57.5	56.7	81.8	34.0	43.5	56.5	58.7	......
1956	60.0	85.5	35.9	50.9	59.4	64.9	......	58.2	57.5	82.3	35.1	45.3	57.3	59.5	......
1957	59.6	84.8	36.9	49.6	59.1	64.4	......	57.8	57.1	81.3	35.1	43.9	56.8	59.3	......
1958	59.5	84.2	37.1	47.4	58.9	64.8	......	56.1	55.4	78.5	34.5	39.9	55.3	56.7	......
1959	59.3	83.7	37.1	46.7	58.7	64.3	......	56.7	56.0	79.3	35.0	39.9	55.9	57.5	......
1960	59.4	83.3	37.7	47.5	58.8	64.5	......	56.8	56.1	78.9	35.5	40.5	55.9	57.9	......
1961	59.3	82.9	38.1	46.9	58.8	64.1	......	56.1	55.4	77.6	35.4	39.1	55.3	56.2	......
1962	58.8	82.0	37.9	46.1	58.3	63.2	......	56.3	55.5	77.7	35.6	39.4	55.4	56.3	......
1963	58.7	81.4	38.3	45.2	58.2	63.0	......	56.1	55.4	77.1	35.8	37.4	55.3	56.2	......
1964	58.7	81.0	38.7	44.5	58.2	63.1	......	56.4	55.7	77.3	36.3	37.3	55.5	57.0	......
1965	58.9	80.7	39.3	45.7	58.4	62.9	......	56.9	56.2	77.5	37.1	38.9	56.0	57.8	......
1966	59.2	80.4	40.3	48.2	58.7	63.0	......	57.6	56.9	77.9	38.3	42.1	56.8	58.4	......
1967	59.6	80.4	41.1	48.4	59.2	62.8	......	58.0	57.3	78.0	39.0	42.2	57.2	58.2	......
1968	59.6	80.1	41.6	48.3	59.3	62.2	......	58.2	57.5	77.8	39.6	42.2	57.4	58.0	......
1969	60.1	79.8	42.7	49.4	59.9	62.1	......	58.7	58.0	77.6	40.7	43.4	58.0	58.1	......
1970	60.4	79.7	43.3	49.9	60.2	61.8	......	58.0	57.4	76.2	40.8	42.3	57.5	56.8	......
1971	60.2	79.1	43.4	49.7	60.1	60.9	......	57.2	56.6	74.9	40.4	41.3	56.8	54.9	......
1972	60.4	78.9	43.9	51.9	60.4	60.2	59.9	57.5	57.0	75.0	41.0	43.5	57.4	54.1	53.7
1973	60.8	78.8	44.7	53.7	60.8	60.5	60.2	58.3	57.8	75.5	42.0	45.9	58.2	55.0	54.5
1974	61.3	78.7	45.7	54.8	61.4	60.3	59.8	58.3	57.8	74.9	42.6	46.0	58.3	54.3	53.5
1975	61.2	77.9	46.3	54.0	61.5	59.6	58.8	56.5	56.1	71.7	42.0	43.3	56.7	51.4	50.1
1976	61.6	77.5	47.3	54.5	61.8	59.8	59.0	57.3	56.8	72.0	43.2	44.2	57.5	52.0	50.8
1977	62.3	77.7	48.4	56.0	62.5	60.4	59.8	58.3	57.9	72.8	44.5	46.1	58.6	52.5	51.4
1978	63.2	77.9	50.0	57.8	63.3	62.2	61.5	59.7	59.3	73.8	46.4	48.3	60.0	54.7	53.6
1979	63.7	77.8	50.9	57.9	63.9	62.2	61.4	60.3	59.9	73.8	47.5	48.5	60.6	55.2	53.8
1980	63.8	77.4	51.5	56.7	64.1	61.7	61.0	59.6	59.2	72.0	47.7	46.6	60.0	53.6	52.3
1981	63.9	77.0	52.1	55.4	64.3	61.3	60.8	59.4	59.0	71.3	48.0	44.6	60.0	52.6	51.3
1982	64.0	76.6	52.6	54.1	64.3	61.6	61.0	58.2	57.8	69.0	47.7	41.5	58.8	50.9	49.4
1983	64.0	76.4	52.9	53.5	64.3	62.1	61.5	58.3	57.9	68.8	48.0	41.5	58.9	51.0	49.5
1984	64.4	76.4	53.6	53.9	64.6	62.6	62.2	59.9	59.5	70.7	49.5	43.7	60.5	53.6	52.3
1985	64.8	76.3	54.5	54.5	65.0	63.3	62.9	60.5	60.1	70.9	50.4	44.4	61.0	54.7	53.4
1986	65.3	76.3	55.3	54.7	65.5	63.7	63.3	61.1	60.7	71.0	51.4	44.6	61.5	55.4	54.1
1985: Jan	64.7	75.4	54.2	55.2	64.9	63.6	63.2	60.3	59.9	70.8	50.1	44.9	60.7	54.8	53.5
Feb	64.8	76.3	54.4	55.2	65.0	63.1	63.1	60.4	60.1	70.8	50.3	45.1	61.0	54.0	52.9
Mar	64.9	76.4	54.6	55.2	65.1	63.5	62.7	60.6	60.2	71.0	50.5	45.1	61.1	54.7	53.2
Apr	64.9	76.4	54.5	54.7	65.0	63.6	62.9	60.5	60.2	71.0	50.4	45.1	61.0	54.9	53.4
May	64.8	76.3	54.4	55.0	65.0	63.4	62.8	60.5	60.1	71.1	50.3	44.8	61.0	54.6	53.1
June	64.5	76.1	54.1	52.4	64.8	63.0	62.5	60.2	59.8	70.6	50.1	42.8	60.6	54.9	53.6
July	64.7	76.2	54.3	55.2	64.9	63.3	62.8	60.3	59.9	70.7	50.2	44.3	60.8	54.7	53.3
Aug	64.6	76.1	54.2	53.5	64.8	63.0	62.7	60.4	60.1	70.9	50.3	44.0	60.8	54.9	53.9
Sept	64.9	76.3	54.6	54.1	65.1	63.2	62.8	60.6	60.3	71.0	50.6	44.4	61.1	54.7	53.4
Oct	64.9	76.4	54.6	54.6	65.2	63.1	62.8	60.7	60.3	71.0	50.7	43.7	61.2	54.6	53.5
Nov	64.9	76.2	54.7	54.4	65.2	63.3	62.9	60.7	60.3	71.0	50.8	44.4	61.3	54.4	53.2
Dec	64.9	76.1	54.9	54.4	65.2	63.7	63.4	60.8	60.4	70.9	50.9	44.1	61.3	55.1	53.9
1986: Jan	65.0	76.3	54.8	53.6	65.2	63.8	63.3	61.0	60.6	71.3	50.9	43.9	61.4	55.5	54.1
Feb	65.1	76.3	54.9	54.9	65.3	63.6	63.3	60.7	60.4	71.0	50.8	44.5	61.2	55.1	53.9
Mar	65.1	76.3	55.0	54.9	65.3	64.0	63.5	60.8	60.5	71.0	50.9	44.8	61.3	55.5	54.2
Apr	65.1	76.2	55.1	55.4	65.3	63.9	63.7	60.9	60.5	70.9	51.0	44.8	61.3	55.3	54.3
May	65.2	76.3	55.2	55.2	65.4	64.0	63.8	60.9	60.5	70.8	51.2	44.8	61.4	55.4	54.3
June	65.4	76.3	55.5	54.8	65.6	64.0	63.6	61.1	60.7	70.9	51.5	44.5	61.6	55.4	54.2
July	65.4	76.2	55.5	54.5	65.6	63.6	63.0	61.2	60.8	70.9	51.7	44.8	61.6	55.5	54.1
Aug	65.3	76.1	55.6	54.8	65.6	63.3	62.7	61.2	60.9	70.9	51.8	45.0	61.8	55.0	53.5
Sept	65.3	76.2	55.5	54.8	65.6	63.6	63.1	61.1	60.8	70.9	51.5	44.7	61.6	55.3	53.8
Oct	65.4	76.1	55.6	55.0	65.6	63.8	63.3	61.2	60.8	70.8	51.8	45.3	61.7	55.7	54.2
Nov	65.4	76.4	55.5	54.5	65.7	63.8	63.2	61.3	60.9	71.1	51.7	44.5	61.7	55.7	54.2
Dec	65.3	76.3	55.4	53.8	55.7	63.5	63.1	61.3	60.9	71.2	51.7	44.5	61.8	55.7	54.4

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[1] Civilian labor force as percent of civilian noninstitutional population in group specified. See Table B–31 for total labor force participation rate.

[2] Employment as percent of noninstitutional population in group specified.

Note.—Data relate to persons 16 years of age and over. See footnote 5 and Note, Table B–31.

Source: Department of Labor, Bureau of Labor Statistics.

TABLE B-35.—*Unemployment rate, 1948–86*

[Percent; monthly data seasonally adjusted]

Year or month	Unemployment rate, all workers [1]	Unemployment rate, civilian workers [2]													
		All civilian workers	Males			Females			Both sexes 16–19 years	White	Black and other	Black	Experienced wage and salary workers	Married men, spouse present [3]	Women who maintain families
			Total	16–19 years	20 years and over	Total	16–19 years	20 years and over							
1948	...	3.8	3.6	9.8	3.2	4.1	8.3	3.6	9.2	3.5	5.9	...	4.3	...	...
1949	...	5.9	5.9	14.3	5.4	6.0	12.3	5.3	13.4	5.6	8.9	...	6.8	3.5	...
1950	5.2	5.3	5.1	12.7	4.7	5.7	11.4	5.1	12.2	4.9	9.0	...	6.0	4.6	...
1951	3.2	3.3	2.8	8.1	2.5	4.4	8.3	4.0	8.2	3.1	5.3	...	3.7	1.5	...
1952	2.9	3.0	2.8	8.9	2.4	3.6	8.0	3.2	8.5	2.8	5.4	...	3.4	1.4	...
1953	2.8	2.9	2.8	7.9	2.5	3.3	7.2	2.9	7.6	2.7	4.5	...	3.2	1.7	...
1954	5.4	5.5	5.3	13.5	4.9	6.0	11.4	5.5	12.6	5.0	9.9	...	6.2	4.0	...
1955	4.3	4.4	4.2	11.6	3.8	4.9	10.2	4.4	11.0	3.9	8.7	...	4.8	2.6	...
1956	4.0	4.1	3.8	11.1	3.4	4.8	11.2	4.2	11.1	3.6	8.3	...	4.4	2.3	...
1957	4.2	4.3	4.1	12.4	3.6	4.7	10.6	4.1	11.6	3.8	7.9	...	4.6	2.8	...
1958	6.6	6.8	6.8	17.1	6.2	6.8	14.3	6.1	15.9	6.1	12.6	...	7.3	5.1	...
1959	5.3	5.5	5.2	15.3	4.7	5.9	13.5	5.2	14.6	4.8	10.7	...	5.7	3.6	...
1960	5.4	5.5	5.4	15.3	4.7	5.9	13.9	5.1	14.7	5.0	10.2	...	5.7	3.7	...
1961	6.5	6.7	6.4	17.1	5.7	7.2	16.3	6.3	16.8	6.0	12.4	...	6.8	4.6	...
1962	5.4	5.5	5.2	14.7	4.6	6.2	14.6	5.4	14.7	4.9	10.9	...	5.6	3.6	...
1963	5.5	5.7	5.2	17.2	4.5	6.5	17.2	5.4	17.2	5.0	10.8	...	5.6	3.4	...
1964	5.0	5.2	4.6	15.8	3.9	6.2	16.6	5.2	16.2	4.6	9.6	...	5.0	2.8	...
1965	4.4	4.5	4.0	14.1	3.2	5.5	15.7	4.5	14.8	4.1	8.1	...	4.3	2.4	...
1966	3.7	3.8	3.2	11.7	2.5	4.8	14.1	3.8	12.8	3.4	7.3	...	3.5	1.9	...
1967	3.7	3.8	3.1	12.3	2.3	5.2	13.5	4.2	12.9	3.4	7.4	...	3.6	1.8	4.9
1968	3.5	3.6	2.9	11.6	2.2	4.8	14.0	3.8	12.7	3.2	6.7	...	3.4	1.6	4.4
1969	3.4	3.5	2.8	11.4	2.1	4.7	13.3	3.7	12.2	3.1	6.4	...	3.3	1.5	4.4
1970	4.8	4.9	4.4	15.0	3.5	5.9	15.6	4.8	15.3	4.5	8.2	...	4.8	2.6	5.4
1971	5.8	5.9	5.3	16.6	4.4	6.9	17.2	5.7	16.9	5.4	9.9	...	5.7	3.2	7.3
1972	5.5	5.6	5.0	15.9	4.0	6.6	16.7	5.4	16.2	5.1	10.0	10.4	5.3	2.8	7.2
1973	4.8	4.9	4.2	13.9	3.3	6.0	15.3	4.9	14.5	4.3	9.0	9.4	4.5	2.3	7.1
1974	5.5	5.6	4.9	15.6	3.8	6.7	16.6	5.5	16.0	5.0	9.9	10.5	5.3	2.7	7.0
1975	8.3	8.5	7.9	20.1	6.8	9.3	19.7	8.0	19.9	7.8	13.8	14.8	8.2	5.1	10.0
1976	7.6	7.7	7.1	19.2	5.9	8.6	18.7	7.4	19.0	7.0	13.1	14.0	7.3	4.2	10.1
1977	6.9	7.1	6.3	17.3	5.2	8.2	18.3	7.0	17.8	6.2	13.1	14.0	6.6	3.6	9.4
1978	6.0	6.1	5.3	15.8	4.3	7.2	17.1	6.0	16.4	5.2	11.9	12.8	5.6	2.8	8.5
1979	5.8	5.8	5.1	15.9	4.2	6.8	16.4	5.7	16.1	5.1	11.3	12.3	5.5	2.8	8.3
1980	7.0	7.1	6.9	18.3	5.9	7.4	17.2	6.4	17.8	6.3	13.1	14.3	6.9	4.2	9.2
1981	7.5	7.6	7.4	20.1	6.3	7.9	19.0	6.8	19.6	6.7	14.2	15.6	7.3	4.3	10.4
1982	9.5	9.7	9.9	24.4	8.8	9.4	21.9	8.3	23.2	8.6	17.3	18.9	9.3	6.5	11.7
1983	9.5	9.6	9.9	23.3	8.9	9.2	21.3	8.1	22.4	8.4	17.8	19.5	9.2	6.5	12.2
1984	7.4	7.5	7.4	19.6	6.6	7.6	18.0	6.8	18.9	6.5	14.4	15.9	7.1	4.6	10.3
1985	7.1	7.2	7.0	19.5	6.2	7.4	17.6	6.6	18.6	6.2	13.7	15.1	6.8	4.3	10.4
1986	6.9	7.0	6.9	19.0	6.1	7.1	17.6	6.2	18.3	6.0	13.1	14.5	6.6	4.4	9.8
1985: Jan	7.3	7.4	7.2	19.4	6.3	7.7	18.2	6.8	18.8	6.4	13.9	15.2	7.0	4.5	10.2
Feb	7.2	7.3	7.1	19.5	6.3	7.5	17.1	6.7	18.3	6.2	14.4	16.1	6.8	4.4	10.8
Mar	7.1	7.2	7.0	18.6	6.2	7.5	18.0	6.7	18.3	6.2	13.9	15.2	6.7	4.2	10.2
Apr	7.1	7.3	7.1	18.4	6.3	7.5	16.8	6.7	17.6	6.2	13.7	15.2	6.8	4.3	10.8
May	7.1	7.2	6.9	19.1	6.0	7.6	18.1	6.7	18.6	6.1	13.9	15.4	6.7	4.0	10.7
June	7.2	7.3	7.2	19.0	6.4	7.4	17.8	6.7	18.5	6.4	13.0	14.2	6.8	4.6	9.8
July	7.2	7.3	7.1	20.7	6.2	7.5	18.6	6.6	19.7	6.3	13.6	15.1	6.8	4.3	10.5
Aug	7.0	7.1	6.9	19.5	6.0	7.3	15.8	6.6	17.8	6.2	12.8	14.1	6.8	4.2	10.7
Sept	7.0	7.1	6.9	19.0	6.1	7.4	16.7	6.7	17.9	6.1	13.6	15.0	6.8	4.4	11.1
Oct	7.0	7.1	7.1	21.7	6.1	7.2	18.0	6.4	20.0	6.1	13.5	14.8	6.7	4.2	10.6
Nov	6.9	7.0	6.9	19.5	6.0	7.2	17.1	6.4	18.4	5.9	14.1	15.5	6.6	4.3	10.0
Dec	6.9	7.0	6.8	19.5	6.0	7.3	18.5	6.4	19.0	6.0	13.5	15.0	6.6	4.3	9.6
1986: Jan	6.7	6.8	6.6	18.3	5.8	7.0	18.1	6.1	18.2	5.8	13.1	14.6	6.3	4.3	9.9
Feb	7.1	7.2	7.0	19.5	6.2	7.5	18.3	6.6	18.9	6.3	13.3	14.9	6.8	4.5	9.9
Mar	7.0	7.2	7.0	19.2	6.2	7.3	17.5	6.5	18.4	6.2	13.4	14.8	6.7	4.5	10.1
Apr	7.0	7.1	6.9	20.0	6.0	7.3	18.5	6.4	19.3	6.1	13.5	14.8	6.7	4.2	9.5
May	7.1	7.2	7.1	20.0	6.2	7.2	17.5	6.4	18.8	6.2	13.5	14.8	6.8	4.4	10.1
June	7.0	7.1	7.1	19.9	6.2	7.2	17.9	6.3	18.9	6.1	13.5	14.9	6.6	4.5	10.0
July	6.9	7.0	7.0	18.4	6.2	7.0	17.3	6.2	17.9	6.0	12.7	14.2	6.6	4.4	9.5
Aug	6.7	6.8	6.8	19.1	5.9	6.9	16.7	6.1	18.0	5.8	13.1	14.6	6.5	4.2	10.1
Sept	6.9	7.0	7.0	19.1	6.2	7.0	17.7	6.2	18.5	6.0	13.1	14.6	6.5	4.3	9.8
Oct	6.8	6.9	7.0	18.2	6.2	6.9	17.2	6.1	17.7	6.0	12.7	14.3	6.6	4.6	8.9
Nov	6.8	6.9	6.9	18.3	6.2	6.9	18.2	6.1	18.2	6.0	12.7	14.2	6.5	4.5	9.7
Dec	6.6	6.7	6.7	17.8	6.0	6.7	16.8	5.9	17.3	5.8	12.3	13.7	6.3	4.3	9.8

[1] Unemployed as percent of labor force including resident Armed Forces.

[2] Unemployed as percent of civilian labor force in group specified.

[3] Data for 1949 and 1951–54 are for April; 1950, for March.

Note.—Data relate to persons 16 years of age and over. See footnote 5 and Note, Table B-31.

Source: Department of Labor, Bureau of Labor Statistics.

TABLE B-36.—*Civilian labor force participation rate by demographic characteristic, 1954–86*

[Percent;[1] monthly data seasonally adjusted]

Year or month	All civilian workers	White							Black						
		Total	Males			Females			Total	Males			Females		
			Total	16–19 years	20 years and over	Total	16–19 years	20 years and over		Total	16–19 years	20 years and over	Total	16–19 years	20 years and over
1954	58.8	58.2	85.6	57.6	87.8	33.3	40.6	32.7	......	......	......	......	......	......	......
1955	59.3	58.7	85.4	58.6	87.5	34.5	40.7	34.0	......	......	......	......	......	......	......
1956	60.0	59.4	85.6	60.4	87.6	35.7	43.1	35.1	......	......	......	......	......	......	......
1957	59.6	59.1	84.8	59.2	86.9	35.7	42.2	35.2	......	......	......	......	......	......	......
1958	59.5	58.9	84.3	56.5	86.6	35.8	40.1	35.5	......	......	......	......	......	......	......
1959	59.3	58.7	83.8	55.9	86.3	36.0	39.6	35.6	......	......	......	......	......	......	......
1960	59.4	58.8	83.4	55.9	86.0	36.5	40.3	36.2	......	......	......	......	......	......	......
1961	59.3	58.8	83.0	54.5	85.7	36.9	40.6	36.6	......	......	......	......	......	......	......
1962	58.8	58.3	82.1	53.8	84.9	36.7	39.8	36.5	......	......	......	......	......	......	......
1963	58.7	58.2	81.5	53.1	84.4	37.2	38.7	37.0	......	......	......	......	......	......	......
1964	58.7	58.2	81.1	52.7	84.2	37.5	37.8	37.5	......	......	......	......	......	......	......
1965	58.9	58.4	80.8	54.1	83.9	38.1	39.2	38.0	......	......	......	......	......	......	......
1966	59.2	58.7	80.6	55.9	83.6	39.2	42.6	38.8	......	......	......	......	......	......	......
1967	59.6	59.2	80.6	56.3	83.5	40.1	42.5	39.8	......	......	......	......	......	......	......
1968	59.6	59.3	80.4	55.9	83.2	40.7	43.0	40.4	......	......	......	......	......	......	......
1969	60.1	59.9	80.2	56.8	83.0	41.8	44.6	41.5	......	......	......	......	......	......	......
1970	60.4	60.2	80.0	57.5	82.8	42.6	45.6	42.2	......	......	......	......	......	......	......
1971	60.2	60.1	79.6	57.9	82.3	42.6	45.4	42.3	......	......	......	......	......	......	......
1972	60.4	60.4	79.6	60.1	82.0	43.2	48.1	42.7	59.9	73.6	46.3	78.5	48.7	32.2	51.2
1973	60.8	60.8	79.4	62.0	81.6	44.1	50.1	43.5	60.2	73.4	45.7	78.4	49.3	34.2	51.6
1974	61.3	61.4	79.4	62.9	81.4	45.2	51.7	44.4	59.8	72.9	46.7	77.6	49.0	33.4	51.4
1975	61.2	61.5	78.7	61.9	80.7	45.9	51.5	45.3	58.8	70.9	42.6	76.0	48.8	34.2	51.1
1976	61.6	61.8	78.4	62.3	80.3	46.9	52.8	46.2	59.0	70.0	41.3	75.4	49.8	32.9	52.5
1977	62.3	62.5	78.5	64.0	80.2	48.0	54.5	47.3	59.8	70.6	43.2	75.6	50.8	32.9	53.6
1978	63.2	63.3	78.6	65.0	80.1	49.4	56.7	48.7	61.5	71.5	44.9	76.2	53.1	37.3	55.5
1979	63.7	63.9	78.6	64.8	80.1	50.5	57.4	49.8	61.4	71.3	43.6	76.3	53.1	36.8	55.4
1980	63.8	64.1	78.2	63.7	79.8	51.2	56.2	50.6	61.0	70.3	43.2	75.1	53.1	34.9	55.6
1981	63.9	64.3	77.9	62.4	79.5	51.9	55.4	51.5	60.8	70.0	41.6	74.5	53.5	34.0	56.0
1982	64.0	64.3	77.4	60.0	79.2	52.4	55.0	52.2	61.0	70.1	39.8	74.7	53.7	33.5	56.2
1983	64.0	64.3	77.1	59.4	78.9	52.7	54.5	52.5	61.5	70.6	39.9	75.2	54.2	33.0	56.8
1984	64.4	64.6	77.1	59.0	78.7	53.3	55.4	53.1	62.2	70.8	41.7	74.8	55.2	35.0	57.6
1985	64.8	65.0	77.0	59.7	78.5	54.1	55.2	54.0	62.9	70.8	44.6	74.4	56.5	37.9	58.6
1986	65.3	65.5	76.9	59.3	78.5	55.0	56.3	54.9	63.3	71.2	43.7	74.8	56.9	39.1	58.9
1985: Jan	64.7	64.9	77.0	60.5	78.5	53.9	55.9	53.7	63.2	70.9	45.0	74.5	56.9	37.9	59.1
Feb	64.8	65.0	77.0	60.1	78.5	54.1	56.6	53.9	63.1	71.1	43.0	75.0	56.6	39.9	58.4
Mar	64.9	65.1	77.0	60.5	78.5	54.3	56.3	54.1	62.7	70.4	43.5	74.1	56.6	38.5	58.6
Apr	64.9	65.0	77.0	60.6	78.5	54.0	54.5	54.0	62.9	70.5	44.5	74.1	56.7	37.8	58.9
May	64.8	65.0	77.1	60.8	78.5	54.0	55.1	53.9	62.8	70.5	43.1	74.2	56.6	40.7	58.4
June	64.5	64.8	76.9	59.3	78.5	53.7	52.6	53.8	62.5	70.1	41.7	74.0	56.3	34.6	58.8
July	64.7	64.9	76.9	60.4	78.3	53.9	55.2	53.8	62.8	70.7	46.5	74.1	56.4	39.0	58.4
Aug	64.6	64.8	76.8	58.7	78.4	53.9	53.6	53.9	62.7	71.1	46.4	74.4	55.9	35.2	58.3
Sept	64.9	65.1	76.9	58.6	78.6	54.3	55.7	54.2	62.8	71.2	44.9	74.7	56.1	35.9	58.3
Oct	64.9	65.2	77.1	60.0	78.7	54.4	55.5	54.3	62.8	71.0	46.2	74.4	56.1	38.4	58.1
Nov	64.9	65.2	77.0	58.6	78.6	54.4	56.2	54.2	62.9	70.6	43.6	74.2	56.8	38.9	58.7
Dec	64.9	65.2	76.8	58,9	78.4	54.6	55.9	54.5	63.4	71.0	45.7	74.4	57.2	38.6	59.2
1986: Jan	65.0	65.2	77.0	57.8	78.6	54.5	55.3	54.4	63.3	71.5	44.5	75.2	56.6	39.6	58.5
Feb	65.1	65.3	77.0	59.5	78.6	54.6	56.6	54.4	63.3	71.3	45.7	74.7	56.8	39.9	58.6
Mar	65.1	65.3	76.9	58.7	78.5	54.7	56.8	54.5	63.5	71.6	45.5	75.1	57.0	42.0	58.6
Apr	65.1	65.3	76.8	59.5	78.3	54.7	56.7	54.5	63.7	71.5	45.6	75.0	57.3	41.5	59.1
May	65.2	65.4	76.8	59.5	78.4	54.9	56.6	54.8	63.8	71.9	48.1	75.1	57.2	38.4	59.2
June	65.4	65.6	76.9	59.5	78.5	55.2	56.2	55.1	63.6	71.6	43.8	75.3	57.2	42.1	58.8
July	65.4	65.6	76.8	58.9	78.4	55.3	55.5	55.3	63.0	71.2	42.7	75.0	56.4	34.8	58.8
Aug	65.3	65.6	76.8	59.9	78.2	55.4	56.2	55.4	62.7	70.5	41.8	74.2	56.4	35.9	58.6
Sept	65.3	65.6	76.9	60.3	78.4	55.2	55.5	55.2	63.1	70.7	42.2	74.4	56.9	39.7	58.8
Oct	65.4	65.6	76.9	59.8	78.3	55.3	56.9	55.2	63.3	70.8	42.2	74.6	57.2	40.0	59.1
Nov	65.4	65.7	77.1	59.6	78.7	55.2	56.3	55.1	63.2	70.5	40.4	74.5	57.3	38.2	59.3
Dec	65.3	65.7	77.1	58.2	78.8	55.1	56.5	55.0	63.1	70.7	41.6	74.5	56.9	38.1	58.9

[1] Civilian labor force as percent of civilian noninstitutional population in group specified.

Note.—Data relate to persons 16 years of age and over. See footnote 5 and Note, Table B-31.

Source: Department of Labor, Bureau of Labor Statistics.

TABLE B-37.—*Civilian employment/population ratio, 1954–86*

[Percent [1]; monthly data seasonally adjusted]

Year or month	All civilian workers	White							Black						
		Total	Males			Females			Total	Males			Females		
			Total	16–19 years	20 years and over	Total	16–19 years	20 years and over		Total	16–19 years	20 years and over	Total	16–19 years	20 years and over
1954	55.5	55.2	81.5	49.9	84.0	31.4	36.4	31.1	......	......	......	......	......	......	......
1955	56.7	56.5	82.2	52.0	84.7	33.0	37.0	32.7	......	......	......	......	......	......	......
1956	57.5	57.3	82.7	54.1	85.0	34.2	38.9	33.8	......	......	......	......	......	......	......
1957	57.1	56.8	81.8	52.4	84.1	34.2	38.2	33.9	......	......	......	......	......	......	......
1958	55.4	55.3	79.2	47.6	81.8	33.6	35.0	33.5	......	......	......	......	......	......	......
1959	56.0	55.9	79.9	48.1	82.8	34.0	34.8	34.0	......	......	......	......	......	......	......
1960	56.1	55.9	79.4	48.1	82.4	34.6	35.1	34.5	......	......	......	......	......	......	......
1961	55.4	55.3	78.2	45.9	81.4	34.5	34.6	34.5	......	......	......	......	......	......	......
1962	55.5	55.4	78.4	46.4	81.5	34.7	34.8	34.7	......	......	......	......	......	......	......
1963	55.4	55.3	77.7	44.7	81.1	35.0	32.9	35.2	......	......	......	......	......	......	......
1964	55.7	55.5	77.8	45.0	81.3	35.5	32.2	35.8	......	......	......	......	......	......	......
1965	56.2	56.0	77.9	47.1	81.5	36.2	33.7	36.5	......	......	......	......	......	......	......
1966	56.9	56.8	78.3	50.1	81.7	37.5	37.5	37.5	......	......	......	......	......	......	......
1967	57.3	57.2	78.4	50.2	81.7	38.3	37.7	38.3	......	......	......	......	......	......	......
1968	57.5	57.4	78.3	50.3	81.6	38.9	37.8	39.1	......	......	......	......	......	......	......
1969	58.0	58.0	78.2	51.1	81.4	40.1	39.5	40.1	......	......	......	......	......	......	......
1970	57.4	57.5	76.8	49.6	80.1	40.3	39.5	40.4	......	......	......	......	......	......	......
1971	56.6	56.8	75.7	49.2	79.0	39.9	38.6	40.1	......	......	......	......	......	......	......
1972	57.0	57.4	76.0	51.5	79.0	40.7	41.3	40.6	53.7	66.8	31.6	73.0	43.0	19.2	46.5
1973	57.8	58.2	76.5	54.3	79.2	41.8	43.6	41.6	54.5	67.5	32.8	73.7	43.8	22.0	47.2
1974	57.8	58.3	75.9	54.4	78.6	42.4	44.3	42.2	53.5	65.8	31.4	71.9	43.5	20.9	46.9
1975	56.1	56.7	73.0	50.6	75.7	42.0	42.5	41.9	50.1	60.6	26.3	66.5	41.6	20.2	44.9
1976	56.8	57.5	73.4	51.5	76.0	43.2	44.2	43.1	50.8	60.6	25.8	66.8	42.8	19.2	46.4
1977	57.9	58.6	74.1	54.4	76.5	44.5	45.9	44.4	51.4	61.4	26.4	67.5	43.3	18.5	47.0
1978	59.3	60.0	75.0	56.3	77.2	46.3	48.5	46.1	53.6	63.3	28.5	69.1	45.8	22.1	49.3
1979	59.9	60.6	75.1	55.7	77.3	47.5	49.4	47.3	53.8	63.4	28.7	69.1	46.0	22.4	49.3
1980	59.2	60.0	73.4	53.4	75.6	47.8	47.9	47.8	52.3	60.4	27.0	65.8	45.7	21.0	49.1
1981	59.0	60.0	72.8	51.3	75.1	48.3	46.2	48.5	51.3	59.1	24.6	64.5	45.1	19.7	48.5
1982	57.8	56.8	70.6	47.0	73.0	48.1	44.6	48.4	49.4	56.0	20.3	61.4	44.2	17.7	47.5
1983	57.9	58.9	70.4	47.4	72.6	48.5	44.5	48.9	49.5	56.3	20.4	61.6	44.1	17.0	47.4
1984	59.5	60.5	72.1	49.1	74.3	49.8	47.0	50.0	52.3	59.2	23.9	64.1	46.7	20.1	49.8
1985	60.1	61.0	72.3	49.9	74.3	50.7	47.1	51.0	53.4	60.0	26.3	64.6	48.1	23.1	50.9
1986	60.7	61.5	72.3	49.6	74.3	51.7	47.9	52.0	54.1	60.6	26.5	65.1	48.8	23.8	51.6
1985: Jan	59.9	60.7	72.2	50.6	74.1	50.3	47.3	50.5	53.5	59.9	25.3	64.7	48.4	23.3	51.2
Feb	60.1	61.0	72.2	49.9	74.2	50.7	48.9	50.8	52.9	59.6	25.1	64.4	47.5	22.2	50.4
Mar	60.2	61.1	72.4	50.8	74.3	50.8	47.8	51.0	53.2	59.5	26.1	64.1	48.1	22.7	50.9
Apr	60.2	61.0	72.4	51.1	74.2	50.6	46.8	50.9	53.4	59.6	27.1	64.1	48.3	23.3	51.1
May	60.1	61.0	72.6	50.8	74.5	50.5	46.7	50.8	53.1	59.6	26.4	64.2	47.9	23.8	50.6
June	59.8	60.6	72.0	49.8	74.0	50.3	44.5	50.7	53.6	59.9	24.2	64.8	48.5	22.7	51.4
July	59.9	60.8	72.1	49.9	74.0	50.4	46.9	50.7	53.3	60.0	26.9	64.5	47.9	23.8	50.6
Aug	60.1	60.8	72.1	48.8	74.2	50.5	46.3	50.9	53.9	61.3	29.6	65.6	47.8	22.4	50.7
Sept	60.3	61.1	72.4	49.4	74.4	50.8	47.7	51.1	53.4	60.4	26.6	65.0	47.7	22.7	50.5
Oct	60.3	61.2	72.5	48.8	74.6	51.0	47.1	51.3	53.5	60.0	27.4	64.4	48.2	22.8	51.1
Nov	60.3	61.3	72.4	49.3	74.5	51.1	48.0	51.3	53.2	59.5	23.7	64.3	48.1	24.4	50.8
Dec	60.4	61.3	72.3	49.2	74.4	51.1	47.2	51.4	53.9	60.1	27.0	64.6	48.8	22.1	51.8
1986: Jan	60.6	61.4	72.6	49.1	74.7	51.2	47.0	51.5	54.1	60.8	26.2	65.5	48.5	23.0	51.4
Feb	60.4	61.2	72.3	49.7	74.3	51.0	47.9	51.2	53.9	60.4	27.7	64.8	48.6	23.7	51.3
Mar	60.5	61.3	72.2	49.4	74.2	51.2	48.8	51.4	54.2	60.9	26.1	65.5	48.7	24.3	51.4
Apr	60.5	61.3	72.2	49.3	74.2	51.3	48.0	51.5	54.3	60.9	26.8	65.4	48.9	23.8	51.7
May	60.5	61.4	72.1	49.4	74.1	51.5	48.2	51.8	54.3	61.1	28.6	65.4	48.9	22.8	51.7
June	60.7	61.6	72.2	49.3	74.2	51.9	48.0	52.2	54.2	60.7	26.4	65.3	48.8	25.5	51.4
July	60.8	61.6	72.1	49.7	74.1	52.0	47.4	52.4	54.1	60.6	25.4	65.3	48.8	22.6	51.6
Aug	60.9	61.8	72.3	50.0	74.3	52.2	48.2	52.5	53.5	59.9	25.5	64.5	48.3	[illegible]	51.3
Sept	60.8	61.6	72.3	50.2	74.2	51.9	47.1	52.3	53.8	60.0	25.9	64.5	48.9	24.5	51.5
Oct	60.8	61.7	72.2	50.5	74.1	52.0	48.2	52.3	54.2	60.3	26.2	64.8	49.3	26.5	51.8
Nov	60.9	61.7	72.4	49.9	74.4	51.9	47.5	52.3	54.2	60.4	26.3	65.0	49.2	24.1	51.9
Dec	60.9	61.8	72.6	49.2	74.6	52.0	48.3	52.3	54.4	61.2	26.6	65.7	49.0	24.0	51.7

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[1] Civilian employment as percent of civilian noninstitutional population in group specified.

Note.—Data relate to persons 16 years of age and over. See footnote 5 and Note, Table B-31.

Source: Department of Labor, Bureau of Labor Statistics.

Table B-38.—*Civilian unemployment rate by demographic characteristic, 1948–86*

[Percent;[1] monthly data seasonally adjusted]

Year or month	All civilian workers	White							Black						
		Total	Males			Females			Total	Males			Females		
			Total	16–19 years	20 years and over	Total	16–19 years	20 years and over		Total	16–19 years	20 years and over	Total	16–19 years	20 years and over
1948	3.8	3.5	3.4	……	……	3.8	……	……	……	……	……	……	……	……	……
1949	5.9	5.6	5.6	……	……	5.7	……	……	……	……	……	……	……	……	……
1950	5.3	4.9	4.7	……	……	5.3	……	……	……	……	……	……	……	……	……
1951	3.3	3.1	2.6	……	……	4.2	……	……	……	……	……	……	……	……	……
1952	3.0	2.8	2.5	……	……	3.3	……	……	……	……	……	……	……	……	……
1953	2.9	2.7	2.5	……	……	3.1	……	……	……	……	……	……	……	……	……
1954	5.5	5.0	4.8	13.4	4.4	5.5	10.4	5.1	……	……	……	……	……	……	……
1955	4.4	3.9	3.7	11.3	3.3	4.3	9.1	3.9	……	……	……	……	……	……	……
1956	4.1	3.6	3.4	10.5	3.0	4.2	9.7	3.7	……	……	……	……	……	……	……
1957	4.3	3.8	3.6	11.5	3.2	4.3	9.5	3.8	……	……	……	……	……	……	……
1958	6.8	6.1	6.1	15.7	5.5	6.2	12.7	5.6	……	……	……	……	……	……	……
1959	5.5	4.8	4.6	14.0	4.1	5.3	12.0	4.7	……	……	……	……	……	……	……
1960	5.5	5.0	4.8	14.0	4.2	5.3	12.7	4.6	……	……	……	……	……	……	……
1961	6.7	6.0	5.7	15.7	5.1	6.5	14.8	5.7	……	……	……	……	……	……	……
1962	5.5	4.9	4.6	13.7	4.0	5.5	12.8	4.7	……	……	……	……	……	……	……
1963	5.7	5.0	4.7	15.9	3.9	5.8	15.1	4.8	……	……	……	……	……	……	……
1964	5.2	4.6	4.1	14.7	3.4	5.5	14.9	4.6	……	……	……	……	……	……	……
1965	4.5	4.1	3.6	12.9	2.9	5.0	14.0	4.0	……	……	……	……	……	……	……
1966	3.8	3.4	2.8	10.5	2.2	4.3	12.1	3.5	……	……	……	……	……	……	……
1967	3.8	3.4	2.7	10.7	2.1	4.6	11.5	3.8	……	……	……	……	……	……	……
1968	3.6	3.2	2.6	10.1	2.0	4.3	12.1	3.4	……	……	……	……	……	……	……
1969	3.5	3.1	2.5	10.0	1.9	4.2	11.5	3.4	……	……	……	……	……	……	……
1970	4.9	4.5	4.0	13.7	3.2	5.4	13.4	4.4	……	……	……	……	……	……	……
1971	5.9	5.4	4.9	15.1	4.0	6.3	15.1	5.3	……	……	……	……	……	……	……
1972	5.6	5.1	4.5	14.2	3.6	5.9	14.2	4.9	10.4	9.3	31.7	7.0	11.8	40.5	9.0
1973	4.9	4.3	3.8	12.3	3.0	5.3	13.0	4.3	9.4	8.0	27.8	6.0	11.1	36.1	8.6
1974	5.6	5.0	4.4	13.5	3.5	6.1	14.5	5.1	10.5	9.8	33.1	7.4	11.3	37.4	8.8
1975	8.5	7.8	7.2	18.3	6.2	8.6	17.4	7.5	14.8	14.8	38.1	12.5	14.8	41.0	12.2
1976	7.7	7.0	6.4	17.3	5.4	7.9	16.4	6.8	14.0	13.7	37.5	11.4	14.3	41.6	11.7
1977	7.1	6.2	5.5	15.0	4.7	7.3	15.9	6.2	14.0	13.3	39.2	10.7	14.9	43.4	12.3
1978	6.1	5.2	4.6	13.5	3.7	6.2	14.4	5.2	12.8	11.8	36.7	9.3	13.8	40.8	11.2
1979	5.8	5.1	4.5	13.9	3.6	5.9	14.0	5.0	12.3	11.4	34.2	9.3	13.3	39.1	10.9
1980	7.1	6.3	6.1	16.2	5.3	6.5	14.8	5.6	14.3	14.5	37.5	12.4	14.0	39.8	11.9
1981	7.6	6.7	6.5	17.9	5.6	6.9	16.6	5.9	15.6	15.7	40.7	13.5	15.6	42.2	13.4
1982	9.7	8.6	8.8	21.7	7.8	8.3	19.0	7.3	18.9	20.1	48.9	17.8	17.6	47.1	15.4
1983	9.6	8.4	8.8	20.2	7.9	7.9	18.3	6.9	19.5	20.3	48.8	18.1	18.6	48.2	16.5
1984	7.5	6.5	6.4	16.8	5.7	6.5	15.2	5.8	15.9	16.4	42.7	14.3	15.4	42.6	13.5
1985	7.2	6.2	6.1	16.5	5.4	6.4	14.8	5.7	15.1	15.3	41.0	13.2	14.9	39.2	13.1
1986	7.0	6.0	6.0	16.3	5.3	6.1	14.9	5.4	14.5	14.8	39.3	12.9	14.2	39.2	12.4
1985: Jan	7.4	6.4	6.3	16.4	5.6	6.7	15.4	6.0	15.2	15.5	43.8	13.1	15.0	38.5	13.3
Feb	7.3	6.2	6.1	16.9	5.4	6.3	13.6	5.7	16.1	16.2	41.6	14.2	16.0	44.5	13.7
Mar	7.2	6.2	6.0	16.0	5.3	6.5	15.1	5.8	15.2	15.5	40.0	13.5	15.0	41.1	13.1
Apr	7.3	6.2	6.1	15.6	5.4	6.4	14.2	5.8	15.2	15.4	39.2	13.5	14.9	38.3	13.2
May	7.2	6.1	5.9	16.5	5.1	6.5	15.1	5.8	15.4	15.4	38.8	13.5	15.5	41.6	13.4
June	7.3	6.4	6.4	16.1	5.7	6.5	15.4	5.8	14.2	14.5	42.1	12.4	13.9	34.4	12.5
July	7.3	6.3	6.2	17.4	5.5	6.4	15.0	5.7	15.1	15.2	42.2	12.9	15.0	38.9	13.2
Aug	7.1	6.2	6.1	17.0	5.3	6.3	13.6	5.7	14.1	13.7	36.1	11.8	14.5	36.3	13.0
Sept	7.1	6.1	5.9	15.7	5.2	6.4	14.4	5.7	15.0	15.1	40.8	13.0	14.9	36.6	13.4
Oct	7.1	6.1	6.1	18.7	5.2	6.2	15.1	5.5	14.8	15.5	40.8	13.4	14.1	40.6	12.1
Nov	7.0	5.9	5.9	15.9	5.2	6.0	14.6	5.3	15.5	15.7	45.7	13.4	15.2	37.3	13.6
Dec	7.0	6.0	5.8	16.4	5.1	6.3	15.6	5.5	15.0	15.3	40.9	13.2	14.6	42.7	12.6
1986: Jan	6.8	5.8	5.6	15.0	5.0	6.1	15.1	5.4	14.6	15.0	41.1	12.9	14.3	41.9	12.2
Feb	7.2	6.3	6.1	16.6	5.4	6.6	15.4	5.9	14.9	15.2	39.5	13.3	14.5	40.7	12.5
Mar	7.2	6.2	6.1	15.9	5.4	6.3	14.1	5.7	14.8	15.0	42.6	12.8	14.5	42.2	12.3
Apr	7.1	6.1	5.9	17.1	5.2	6.2	15.4	5.5	14.8	14.9	41.2	12.8	14.7	42.7	12.5
May	7.2	6.2	6.1	17.0	5.4	6.2	14.7	5.5	14.8	15.0	40.5	12.9	14.5	40.5	12.7
June	7.1	6.1	6.1	17.1	5.4	6.1	14.6	5.4	14.9	15.2	39.7	13.3	14.6	39.4	12.7
July	7.0	6.0	6.0	15.6	5.4	6.0	14.7	5.3	14.2	14.9	40.5	12.9	13.5	35.0	12.1
Aug	6.8	5.8	5.8	16.6	5.1	5.9	14.2	5.2	14.6	14.9	38.8	13.2	14.3	41.9	12.5
Sept	7.0	6.0	6.1	16.6	5.4	6.0	15.1	5.3	14.6	15.1	38.6	13.4	14.2	38.3	12.4
Oct	6.9	6.0	6.1	15.7	5.4	6.0	15.2	5.2	14.3	14.9	37.8	13.1	13.8	33.8	12.4
Nov	6.9	6.0	6.1	16.3	5.4	5.9	15.7	5.2	14.2	14.3	35.0	12.9	14.1	37.0	12.5
Dec	6.7	5.8	5.9	15.5	5.3	5.7	14.6	5.0	13.7	13.5	36.1	11.8	13.9	36.9	12.3

[1] Unemployed as percent of civilian labor force in group specified.

Note.—See footnote 5 and Note, Table B-31.

Source: Department of Labor, Bureau of Labor Statistics.

TABLE B-39.—*Unemployment insurance programs, selected data, 1955–86*

Year or month	All programs			State programs					
								Benefits paid	
	Covered employment[1]	Insured unemployment (weekly average)[2][3]	Total benefits paid (millions of dollars)[2][4]	Insured unemployment	Initial claims	Exhaustions[5]	Insured unemployment as percent of covered employment	Total (millions of dollars)[4]	Average weekly check (dollars)[6]
	Thousands			Weekly average; thousands					
1955	40,018	1,399	1,560.2	1,265	226	25	3.5	1,350.3	25.04
1956	42,751	1,323	1,540.6	1,215	227	20	3.2	1,380.7	27.02
1957	43,436	1,571	1,913.0	1,446	270	23	3.6	1,733.9	28.17
1958	44,411	2,773	4,290.6	2,510	369	50	6.4	3,512.7	30.58
1959	45,728	1,860	2,854.3	1,684	277	33	4.4	2,279.0	30.41
1960	46,334	2,071	3,022.8	1,908	331	31	4.8	2,726.7	32.87
1961	46,266	2,994	4,358.1	2,290	350	46	5.6	3,422.7	33.80
1962	47,776	1,946	3,145.1	1,783	302	32	4.4	2,675.4	34.56
1963	48,434	[7] 1,973	3,025.9	[7] 1,806	[7] 298	30	4.3	2,774.7	35.27
1964	49,637	1,753	2,749.2	1,605	268	26	3.8	2,522.1	35.92
1965	51,580	1,450	2,360.4	1,328	232	21	3.0	2,166.0	37.19
1966	54,739	1,129	1,890.9	1,061	203	15	2.3	1,771.3	39.75
1967	56,342	1,270	2,221.5	1,205	226	17	2.5	2,092.3	41.25
1968	57,977	1,187	2,191.0	1,111	201	16	2.2	2,031.6	43.43
1969	59,999	1,177	2,298.6	1,101	200	16	2.1	2,127.9	46.17
1970	59,526	2,070	4,209.3	1,805	296	25	3.4	3,848.5	50.34
1971	59,375	2,608	6,154.0	2,150	295	39	4.1	4,957.0	54.02
1972	66,458	2,192	5,491.1	1,848	261	35	3.5	4,471.0	56.76
1973	69,897	1,793	4,517.3	1,632	247	29	2.7	4,007.6	59.00
1974	72,451	2,558	6,933.9	2,262	363	37	3.5	5,974.9	64.25
1975	71,037	4,937	16,802.4	3,986	478	81	6.0	11,754.7	70.23
1976	73,459	3,846	12,344.8	2,991	386	63	4.6	8,974.5	75.16
1977	76,419	3,308	10,998.9	2,655	375	55	3.9	8,357.2	78.79
1978	88,804	2,645	9,006.9	2,359	346	39	3.3	7,717.2	83.67
1979	92,062	2,592	9,401.3	2,434	388	39	2.9	8,612.9	89.67
1980	92,659	3,837	16,175.4	3,350	488	59	3.9	13,761.1	98.95
1981	93,300	3,410	15,287.1	3,047	460	57	3.5	13,262.1	106.70
1982	91,628	4,594	23,774.8	4,061	583	80	4.6	20,649.6	119.37
1983	91,898	3,775	20,206.2	3,396	438	80	3.9	17,762.8	123.59
1984	96,474	2,561	13,109.6	2,476	377	50	2.8	12,594.7	123.47
1985	[8] 99,186	2,692	14,495.1	2,611	396	50	2.9	13,977.8	128.23
				**	**		**		
1985: Jan		3,361	1,631.3	2,590	385	52	2.9	1,580.0	127.47
Feb		3,339	1,495.5	2,646	411	52	3.0	1,450.6	128.20
Mar		3,113	1,503.8	2,620	394	54	2.9	1,459.2	128.21
Apr		2,767	1,395.9	2,575	390	57	2.9	1,349.8	128.18
May		2,457	1,257.8	2,562	389	51	2.8	1,221.4	127.00
June		2,340	1,039.2	2,581	398	49	2.9	1,011.8	126.35
July		2,523	1,213.9	2,609	391	51	2.9	1,183.8	125.82
Aug		2,361	1,128.7	2,585	386	47	2.8	1,096.7	126.88
Sept		2,212	1,019.6	2,560	384	43	2.8	988.8	128.37
Oct		2,227	1,120.9	2,535	380	45	2.8	1,085.2	129.41
Nov		2,468	1,049.8	2,560	382	43	2.8	1,014.6	130.90
Dec		2,884	1,383.3	2,564	391	48	2.8	1,341.3	132.13
1986: Jan		3,370	1,715.1	2,591	370	52	2.8	1,662.6	133.57
Feb		3,295	1,543.5	2,610	392	52	2.8	1,495.7	135.00
Mar		3,144	1,585.0	2,654	393	55	2.9	1,539.3	135.59
Apr		2,779	1,516.7	2,612	380	58	2.8	1,472.1	135.23
May		2,556	1,297.5	2,666	382	53	2.9	1,260.8	135.81
June		2,474	1,224.4	2,681	381	51	2.9	1,177.5	135.61
July		2,632	1,361.3	2,698	380	54	2.9	1,308.9	134.16
Aug		2,483	1,204.8	2,705	387	54	2.9	1,160.0	135.03
Sept		2,335	1,184.4	2,691	370	48	2.9	1,144.5	136.78
Oct		2,296	1,195.0	2,596	354	49	2.7	1,147.3	136.73
Nov		2,478	1,075.4	2,549	354	46	2.7	1,030.5	137.49
Dec				2,488	363		2.6		

**Monthly data are seasonally adjusted.

[1] Includes persons under the State, UCFE (Federal employee, effective January 1955), and RRB (Railroad Retirement Board) programs. Beginning October 1958, also includes the UCX program (unemployment compensation for ex-servicemen).

[2] Includes State, UCFE, RR, UCX, UCV (unemployment compensation for veterans, October 1952-January 1960), and SRA (Servicemen's Readjustment Act, September 1944-September 1951) programs. Also includes Federal and State extended benefit programs. Does not include FSB (Federal supplemental benefits), SUA (special unemployment assistance), and Federal Supplemental Compensation programs.

[3] Covered workers who have completed at least 1 week of unemployment.

[4] Annual data are net amounts and monthly data are gross amounts.

[5] Individuals receiving final payments in benefit year.

[6] For total unemployment only.

[7] Programs include Puerto Rican sugarcane workers for initial claims and insured unemployment beginning July 1963.

[8] Latest data available for all programs combined. Workers covered by State programs account for about 97 percent of wage and salary earners.

Source: Department of Labor, Employment and Training Administration.

TABLE B–40.—*Employees on nonagricultural payrolls, by major industry, 1946–86*

[Thousands of persons; monthly data seasonally adjusted]

Year or month	Total	Goods-producing industries					
		Total	Mining	Construction	Manufacturing		
					Total	Durable goods	Nondurable goods
1946	41,652	17,248	862	1,683	14,703	7,742	6,962
1947	43,857	18,509	955	2,009	15,545	8,385	7,159
1948	44,866	18,774	994	2,198	15,582	8,326	7,256
1949	43,754	17,565	930	2,194	14,441	7,489	6,953
1950	45,197	18,506	901	2,364	15,241	8,094	7,147
1951	47,819	19,959	929	2,637	16,393	9,089	7,304
1952	48,793	20,198	898	2,668	16,632	9,349	7,284
1953	50,202	21,074	866	2,659	17,549	10,110	7,438
1954	48,990	19,751	791	2,646	16,314	9,129	7,185
1955	50,641	20,513	792	2,839	16,882	9,541	7,341
1956	52,369	21,104	822	3,039	17,243	9,833	7,411
1957	52,853	20,964	828	2,962	17,174	9,855	7,321
1958	51,324	19,513	751	2,817	15,945	8,829	7,116
1959	53,268	20,411	732	3,004	16,675	9,373	7,303
1960	54,189	20,434	712	2,926	16,796	9,459	7,337
1961	53,999	19,857	672	2,859	16,326	9,070	7,256
1962	55,549	20,451	650	2,948	16,853	9,480	7,373
1963	56,653	20,640	635	3,010	16,995	9,616	7,380
1964	58,283	21,005	634	3,097	17,274	9,816	7,458
1965	60,765	21,926	632	3,232	18,062	10,405	7,656
1966	63,901	23,158	627	3,317	19,214	11,282	7,930
1967	65,803	23,308	613	3,248	19,447	11,439	8,007
1968	67,897	23,737	606	3,350	19,781	11,626	8,155
1969	70,384	24,361	619	3,575	20,167	11,895	8,272
1970	70,880	23,578	623	3,588	19,367	11,208	8,158
1971	71,214	22,935	609	3,704	18,623	10,636	7,987
1972	73,675	23,668	628	3,889	19,151	11,049	8,102
1973	76,790	24,893	642	4,097	20,154	11,891	8,262
1974	78,265	24,794	697	4,020	20,077	11,925	8,152
1975	76,945	22,600	752	3,525	18,323	10,688	7,635
1976	79,382	23,352	779	3,576	18,997	11,077	7,920
1977	82,471	24,346	813	3,851	19,682	11,597	8,086
1978	86,697	25,585	851	4,229	20,505	12,274	8,231
1979	89,823	26,461	958	4,463	21,040	12,760	8,280
1980	90,406	25,658	1,027	4,346	20,285	12,187	8,098
1981	91,156	25,497	1,139	4,188	20,170	12,109	8,061
1982	89,566	23,813	1,128	3,905	18,781	11,039	7,741
1983	90,200	23,334	952	3,948	18,434	10,732	7,702
1984	94,496	24,727	966	4,383	19,378	11,505	7,873
1985	97,614	24,930	930	4,687	19,314	11,516	7,798
1986 [p]	100,168	24,940	792	4,961	19,187	11,346	7,841
1985: Jan	96,366	25,008	948	4,576	19,484	11,642	7,842
Feb	96,507	24,931	946	4,554	19,431	11,611	7,820
Mar	96,870	24,971	945	4,624	19,402	11,595	7,807
Apr	97,104	24,996	949	4,691	19,356	11,559	7,797
May	97,338	24,949	944	4,682	19,323	11,542	7,781
June	97,442	24,897	936	4,671	19,290	11,517	7,773
July	97,672	24,875	928	4,679	19,268	11,483	7,785
Aug	97,890	24,880	922	4,702	19,256	11,473	7,783
Sept	98,128	24,843	917	4,728	19,198	11,421	7,777
Oct	98,428	24,903	913	4,754	19,236	11,447	7,789
Nov	98,666	24,931	907	4,765	19,259	11,453	7,806
Dec	98,910	24,977	901	4,787	19,289	11,461	7,828
1986: Jan	99,296	25,101	897	4,901	19,303	11,466	7,837
Feb	99,429	25,038	880	4,864	19,294	11,455	7,839
Mar	99,484	24,945	852	4,838	19,255	11,418	7,837
Apr	99,783	25,038	821	4,972	19,245	11,415	7,830
May	99,918	24,965	790	4,974	19,201	11,378	7,823
June	99,843	24,854	772	4,947	19,135	11,307	7,828
July	100,105	24,869	768	4,980	19,121	11,294	7,827
Aug	100,283	24,888	753	5,012	19,123	11,302	7,821
Sept	100,560	24,858	743	5,010	19,105	11,271	7,834
Oct	100,826	24,865	746	5,001	19,118	11,266	7,852
Nov [p]	101,065	24,895	743	4,993	19,159	11,283	7,876
Dec [p]	101,334	24,932	738	5,004	19,190	11,298	7,892

See next page for continuation of table.

TABLE B–40.—*Employees on nonagricultural payrolls, by major industry, 1946–86*—Continued

[Thousands of persons; monthly data seasonally adjusted]

Year or month	Service-producing industries								
	Total	Transportation and public utilities	Wholesale trade	Retail trade	Finance, insurance, and real estate	Services	Government		
							Total	Federal	State and local
1946	24,404	4,061	2,291	6,084	1,675	4,697	5,595	2,254	3,341
1947	25,348	4,166	2,471	6,485	1,728	5,025	5,474	1,892	3,582
1948	26,092	4,189	2,605	6,667	1,800	5,181	5,650	1,863	3,787
1949	26,189	4,001	2,602	6,662	1,828	5,240	5,856	1,908	3,948
1950	26,691	4,034	2,635	6,751	1,888	5,357	6,026	1,928	4,098
1951	27,860	4,226	2,727	7,015	1,956	5,547	6,389	2,302	4,087
1952	28,595	4,248	2,812	7,192	2,035	5,699	6,609	2,420	4,188
1953	29,128	4,290	2,854	7,393	2,111	5,835	6,645	2,305	4,340
1954	29,239	4,084	2,867	7,368	2,200	5,969	6,751	2,188	4,563
1955	30,128	4,141	2,926	7,610	2,298	6,240	6,914	2,187	4,727
1956	31,266	4,244	3,018	7,840	2,389	6,497	7,278	2,209	5,069
1957	31,889	4,241	3,028	7,858	2,438	6,708	7,616	2,217	5,399
1958	31,811	3,976	2,980	7,770	2,481	6,765	7,839	2,191	5,648
1959	32,857	4,011	3,082	8,045	2,549	7,087	8,083	2,233	5,850
1960	33,755	4,004	3,143	8,248	2,629	7,378	8,353	2,270	6,083
1961	34,142	3,903	3,133	8,204	2,688	7,620	8,594	2,279	6,315
1962	35,098	3,906	3,198	8,368	2,754	7,982	8,890	2,340	6,550
1963	36,013	3,903	3,248	8,530	2,830	8,277	9,225	2,358	6,868
1964	37,278	3,951	3,337	8,823	2,911	8,660	9,596	2,348	7,248
1965	38,839	4,036	3,466	9,250	2,977	9,036	10,074	2,378	7,696
1966	40,743	4,158	3,597	9,648	3,058	9,498	10,784	2,564	8,220
1967	42,495	4,268	3,689	9,917	3,185	10,045	11,391	2,719	8,672
1968	44,160	4,318	3,779	10,320	3,337	10,567	11,839	2,737	9,102
1969	46,023	4,442	3,907	10,798	3,512	11,169	12,195	2,758	9,437
1970	47,302	4,515	3,993	11,047	3,645	11,548	12,554	2,731	9,823
1971	48,278	4,476	4,001	11,351	3,772	11,797	12,881	2,696	10,185
1972	50,007	4,541	4,113	11,836	3,908	12,276	13,334	2,684	10,649
1973	51,897	4,656	4,277	12,329	4,046	12,857	13,732	2,663	11,068
1974	53,471	4,725	4,433	12,554	4,148	13,441	14,170	2,724	11,446
1975	54,345	4,542	4,415	12,645	4,165	13,892	14,686	2,748	11,937
1976	56,030	4,582	4,546	13,209	4,271	14,551	14,871	2,733	12,138
1977	58,125	4,713	4,708	13,808	4,467	15,303	15,127	2,727	12,399
1978	61,113	4,923	4,969	14,573	4,724	16,252	15,672	2,753	12,919
1979	63,363	5,136	5,204	14,989	4,975	17,112	15,947	2,773	13,174
1980	64,748	5,146	5,275	15,035	5,160	17,890	16,241	2,866	13,375
1981	65,659	5,165	5,358	15,189	5,298	18,619	16,031	2,772	13,259
1982	65,753	5,082	5,278	15,179	5,341	19,036	15,837	2,739	13,098
1983	66,866	4,954	5,268	15,613	5,468	19,694	15,869	2,774	13,096
1984	69,769	5,159	5,555	16,545	5,689	20,797	16,024	2,807	13,216
1985	72,684	5,242	5,740	17,360	5,953	21,974	16,415	2,875	13,540
1986 [p]	75,228	5,285	5,853	17,976	6,304	23,073	16,738	2,899	13,839
1985: Jan	71,358	5,219	5,669	16,988	5,821	21,451	16,210	2,837	13,373
Feb	71,576	5,229	5,673	17,066	5,838	21,541	16,229	2,838	13,391
Mar	71,899	5,220	5,691	17,184	5,864	21,660	16,280	2,852	13,428
Apr	72,108	5,230	5,705	17,240	5,888	21,741	16,304	2,859	13,445
May	72,389	5,241	5,721	17,329	5,913	21,838	16,347	2,869	13,478
June	72,545	5,238	5,736	17,379	5,939	21,893	16,360	2,872	13,488
July	72,797	5,241	5,740	17,404	5,964	21,998	16,450	2,879	13,571
Aug	73,010	5,219	5,762	17,464	5,988	22,115	16,462	2,886	13,576
Sept	73,285	5,257	5,777	17,489	6,014	22,212	16,536	2,899	13,637
Oct	73,525	5,260	5,796	17,543	6,038	22,313	16,575	2,895	13,680
Nov	73,735	5,272	5,796	17,589	6,070	22,415	16,593	2,904	13,689
Dec	73,933	5,277	5,809	17,622	6,095	22,501	16,629	2,913	13,716
1986: Jan	74,195	5,286	5,830	17,734	6,123	22,585	16,637	2,918	13,719
Feb	74,391	5,277	5,843	17,795	6,157	22,638	16,681	2,918	13,763
Mar	74,539	5,280	5,841	17,828	6,184	22,707	16,699	2,923	13,776
Apr	74,745	5,266	5,864	17,851	6,228	22,825	16,711	2,914	13,797
May	74,953	5,265	5,872	17,911	6,261	22,924	16,720	2,899	13,821
June	74,989	5,167	5,829	17,944	6,295	23,072	16,682	2,875	13,807
July	75,236	5,288	5,849	17,992	6,334	23,176	16,597	2,866	13,731
Aug	75,395	5,255	5,863	18,030	6,364	23,255	16,628	2,875	13,753
Sept	75,702	5,316	5,859	18,065	6,388	23,300	16,774	2,901	13,873
Oct	75,961	5,316	5,864	18,143	6,409	23,359	16,870	2,896	13,974
Nov [p]	76,170	5,348	5,864	18,186	6,431	23,444	16,897	2,899	13,998
Dec [p]	76,402	5,358	5,855	18,187	6,466	23,586	16,950	2,901	14,049

Note.—Data in Tables B–40 through B–42 are based on reports from employing establishments and relate to full- and part-time wage and salary workers in nonagricultural establishments who worked during or received pay for any part of the pay period which includes the 12th of the month. Not comparable with labor force data (Tables B–31 through B–38), which include proprietors, self-employed persons, domestic servants, and unpaid family workers; which count persons as employed when they are not at work because of industrial disputes, bad weather, etc., even if they are not paid for the time off; and which are based on a sample of the working-age population. For description and details of the various establishment data, see "Employment and Earnings."

Source: Department of Labor, Bureau of Labor Statistics.

TABLE B-41.—*Average weekly hours and hourly earnings in selected private nonagricultural industries, 1947–86*

[For production or nonsupervisory workers; monthly data seasonally adjusted, except as noted]

Year or month	Average weekly hours				Average gross hourly earnings, current dollars				Adjusted hourly earnings, total private nonagricultural [2]			
									Index, 1977=100		Percent change from a year earlier [4]	
	Total private nonagricultural [1]	Manufacturing	Construction	Retail trade	Total private nonagricultural [1]	Manufacturing	Construction	Retail trade	Current dollars	1977 dollars [3]	Current dollars	1977 dollars
1947	40.3	40.4	38.2	40.3	$1.131	$1.216	$1.540	$0.838	21.6	58.5	....	....
1948	40.0	40.0	38.1	40.2	1.225	1.327	1.712	.901	23.4	58.9	8.3	0.7
1949	39.4	39.1	37.7	40.4	1.275	1.376	1.792	.951	24.5	62.3	4.7	5.8
1950	39.8	40.5	37.4	40.4	1.335	1.439	1.863	.983	25.4	64.0	3.7	2.7
1951	39.9	40.6	38.1	40.4	1.45	1.56	2.02	1.06	27.3	63.6	7.5	–.6
1952	39.9	40.7	38.9	39.8	1.52	1.64	2.13	1.09	28.7	65.5	5.1	3.0
1953	39.6	40.5	37.9	39.1	1.61	1.74	2.28	1.16	30.3	68.7	5.6	4.9
1954	39.1	39.6	37.2	39.2	1.65	1.78	2.38	1.20	31.3	70.5	3.3	2.6
1955	39.6	40.7	37.1	39.0	1.71	1.85	2.45	1.25	32.4	73.3	3.5	4.0
1956	39.3	40.4	37.5	38.6	1.80	1.95	2.57	1.30	34.0	75.9	4.9	3.5
1957	38.8	39.8	37.0	38.1	1.89	2.04	2.71	1.37	35.7	76.9	5.0	1.3
1958	38.5	39.2	36.8	38.1	1.95	2.10	2.82	1.42	37.2	78.0	4.2	1.4
1959	39.0	40.3	37.0	38.2	2.02	2.19	2.93	1.47	38.5	80.0	3.5	2.6
1960	38.6	39.7	36.7	38.0	2.09	2.26	3.07	1.52	39.8	81.4	3.4	1.8
1961	38.6	39.8	36.9	37.6	2.14	2.32	3.20	1.56	41.0	83.0	3.0	2.0
1962	38.7	40.4	37.0	37.4	2.22	2.39	3.31	1.63	42.4	85.0	3.4	2.4
1963	38.8	40.5	37.3	37.3	2.28	2.45	3.41	1.68	43.6	86.3	2.8	1.5
1964	38.7	40.7	37.2	37.0	2.36	2.53	3.55	1.75	44.8	87.5	2.8	1.4
1965	38.8	41.2	37.4	36.6	2.46	2.61	3.70	1.82	46.4	89.0	3.6	1.7
1966	38.6	41.4	37.6	35.9	2.56	2.71	3.89	1.91	48.4	90.3	4.3	1.5
1967	38.0	40.6	37.7	35.3	2.68	2.82	4.11	2.01	50.8	92.2	5.0	2.1
1968	37.8	40.7	37.3	34.7	2.85	3.01	4.41	2.16	53.9	94.0	6.1	2.0
1969	37.7	40.6	37.9	34.2	3.04	3.19	4.79	2.30	57.5	95.0	6.7	1.1
1970	37.1	39.8	37.3	33.8	3.23	3.35	5.24	2.44	61.3	95.7	6.6	.7
1971	36.9	39.9	37.2	33.7	3.45	3.57	5.69	2.60	65.7	98.3	7.2	2.7
1972	37.0	40.5	36.5	33.4	3.70	3.82	6.06	2.75	69.8	101.2	6.2	3.0
1973	36.9	40.7	36.8	33.1	3.94	4.09	6.41	2.91	74.1	101.1	6.2	–.1
1974	36.5	40.0	36.6	32.7	4.24	4.42	6.81	3.14	80.0	98.3	8.0	–2.8
1975	36.1	39.5	36.4	32.4	4.53	4.83	7.31	3.36	86.7	97.6	8.4	–.7
1976	36.1	40.1	36.8	32.1	4.86	5.22	7.71	3.57	92.9	99.0	7.2	1.4
1977	36.0	40.3	36.5	31.6	5.25	5.68	8.10	3.85	100.0	100.0	7.6	1.0
1978	35.8	40.4	36.8	31.0	5.69	6.17	8.66	4.20	108.2	100.5	8.2	.5
1979	35.7	40.2	37.0	30.6	6.16	6.70	9.27	4.53	116.8	97.4	7.9	–3.1
1980	35.3	39.7	37.0	30.2	6.66	7.27	9.94	4.88	127.3	93.5	9.0	–4.0
1981	35.2	39.8	36.9	30.1	7.25	7.99	10.82	5.25	138.9	92.6	9.1	–1.0
1982	34.8	38.9	36.7	29.9	7.68	8.49	11.63	5.48	148.5	93.4	6.9	.9
1983	35.0	40.1	37.1	29.8	8.02	8.83	11.94	5.74	155.4	94.9	4.6	1.6
1984	35.2	40.7	37.8	29.8	8.32	9.19	12.13	5.85	160.3	94.6	3.2	–.3
1985	34.9	40.5	37.7	29.4	8.57	9.53	12.31	5.94	165.2	94.1	3.1	–.5
1986 [p]	34.8	40.7	37.5	29.2	8.76	9.73	12.42	6.02	169.2	94.9	2.4	.9
1985: Jan	35.0	40.5	37.6	29.6	8.44	9.40	12.23	5.88	162.7	94.3	2.7	–.5
Feb	34.9	40.1	37.9	29.6	8.48	9.43	12.32	5.89	163.6	94.5	3.3	–.2
Mar	35.0	40.5	38.1	29.6	8.50	9.45	12.27	5.90	163.8	94.2	3.1	–.8
Apr	34.9	40.3	37.9	29.4	8.52	9.49	12.29	5.90	164.2	94.0	2.9	–1.3
May	35.0	40.4	37.7	29.6	8.53	9.50	12.29	5.92	164.4	94.1	3.1	–.9
June	34.9	40.5	37.3	29.5	8.57	9.53	12.29	5.92	165.2	94.2	3.2	–.8
July	34.8	40.4	37.6	29.4	8.55	9.54	12.29	5.93	165.0	93.9	2.8	–1.0
Aug	34.9	40.6	37.6	29.4	8.59	9.57	12.32	5.94	165.5	94.1	3.1	.1
Sept	34.9	40.7	37.8	29.4	8.62	9.58	12.35	5.98	166.4	94.4	3.1	.4
Oct	34.9	40.7	37.9	29.3	8.63	9.61	12.33	5.96	166.2	94.0	3.0	.1
Nov	34.8	40.7	37.4	29.3	8.65	9.63	12.34	5.97	166.8	93.9	3.0	–.4
Dec	34.9	40.9	37.2	29.2	8.70	9.68	12.40	6.02	167.7	94.0	3.1	–.5
1986: Jan	35.0	40.8	38.4	29.3	8.68	9.65	12.25	5.99	167.3	93.5	2.8	–.9
Feb	34.9	40.7	36.5	29.3	8.71	9.68	12.29	5.99	168.2	94.4	2.8	–.2
Mar	34.9	40.7	36.8	29.3	8.73	9.70	12.23	6.01	168.5	95.1	2.9	.9
Apr	34.8	40.7	37.7	29.2	8.72	9.68	12.34	5.99	168.4	95.4	2.6	1.4
May	34.8	40.7	37.5	29.2	8.73	9.72	12.38	5.99	168.7	95.4	2.6	1.4
June	34.7	40.6	37.1	29.1	8.74	9.71	12.43	6.00	169.2	95.2	2.4	1.0
July	34.7	40.6	37.4	29.2	8.73	9.73	12.40	6.00	168.9	95.1	2.4	1.2
Aug	34.8	40.8	37.6	29.2	8.77	9.76	12.43	6.03	169.3	95.1	2.3	1.1
Sept	34.7	40.8	37.7	29.2	8.76	9.74	12.43	6.05	169.6	95.0	1.9	.6
Oct	34.7	40.7	37.5	29.1	8.80	9.77	12.53	6.05	170.0	95.1	2.3	1.1
Nov [p]	34.8	40.8	37.3	29.2	8.85	9.77	12.65	6.06	170.9	95.4	2.4	1.5
Dec [p]	34.6	40.9	37.4	28.8	8.84	9.80	12.63	6.04	170.8	95.1	1.8	1.1

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[1] Also includes other private industry groups shown in Table B–40.

[2] Adjusted for overtime (in manufacturing only) and for interindustry employment shifts.

[3] Current-dollar earnings index divided by the consumer price index for urban wage earners and clerical workers on a 1977=100 base.

[4] Monthly percent changes are computed from indexes to two decimal places and are based on data not seasonally adjusted.

Note.—See Note, Table B–40.

Source: Department of Labor, Bureau of Labor Statistics.

TABLE B–42.—*Average weekly earnings in selected private nonagricultural industries, 1947–86*

[For production or nonsupervisory workers; monthly data seasonally adjusted, except as noted]

Year or month	Average gross weekly earnings					Percent change from a year earlier, total private nonagricultural[3]	
	Total private nonagricultural[1]		Manufacturing (current dollars)	Construction (current dollars)	Retail trade (current dollars)		
	Current dollars	1977 dollars[2]				Current dollars	1977 dollars
1947	$45.58	$123.52	$49.13	$58.83	$33.77		
1948	49.00	123.43	53.08	65.23	36.22	7.5	−0.1
1949	50.24	127.84	53.80	67.56	38.42	2.5	3.6
1950	53.13	133.83	58.28	69.68	39.71	5.8	4.7
1951	57.86	134.87	63.34	76.96	42.82	8.9	.8
1952	60.65	138.47	66.75	82.86	43.38	4.8	2.7
1953	63.76	144.58	70.47	86.41	45.36	5.1	4.4
1954	64.52	145.32	70.49	88.54	47.04	1.2	.5
1955	67.72	153.21	75.30	90.90	48.75	5.0	5.4
1956	70.74	157.90	78.78	96.38	50.18	4.5	3.1
1957	73.33	158.04	81.19	100.27	52.20	3.7	.1
1958	75.08	157.40	82.32	103.78	54.10	2.4	−.4
1959	78.78	163.78	88.26	108.41	56.15	4.9	4.1
1960	80.67	164.97	89.72	112.67	57.76	2.4	.7
1961	82.60	167.21	92.34	118.08	58.66	2.4	1.4
1962	85.91	172.16	96.56	122.47	60.96	4.0	3.0
1963	88.46	175.17	99.23	127.19	62.66	3.0	1.7
1964	91.33	178.38	102.97	132.06	64.75	3.2	1.8
1965	95.45	183.21	107.53	138.38	66.61	4.5	2.7
1966	98.82	184.37	112.19	146.26	68.57	3.5	.6
1967	101.84	184.83	114.49	154.95	70.95	3.1	.2
1968	107.73	187.68	122.51	164.49	74.95	5.8	1.5
1969	114.61	189.44	129.51	181.54	78.66	6.4	.9
1970	119.83	186.94	133.33	195.45	82.47	4.6	−1.3
1971	127.31	190.58	142.44	211.67	87.62	6.2	1.9
1972	136.90	198.41	154.71	221.19	91.85	7.5	4.1
1973	145.39	198.35	166.46	235.89	96.32	6.2	−.0
1974	154.76	190.12	176.80	249.25	102.68	6.4	−4.1
1975	163.53	184.16	190.79	266.08	108.86	5.7	−3.1
1976	175.45	186.85	209.32	283.73	114.60	7.3	1.5
1977	189.00	189.00	228.90	295.65	121.66	7.7	1.2
1978	203.70	189.31	249.27	318.69	130.20	7.8	.2
1979	219.91	183.41	269.34	342.99	138.62	8.0	−3.1
1980	235.10	172.74	288.62	367.78	147.38	6.9	−5.8
1981	255.20	170.13	318.00	399.26	158.03	8.5	−1.5
1982	267.26	168.09	330.26	426.82	163.85	4.7	−1.2
1983	280.70	171.26	354.08	442.97	171.05	5.0	1.9
1984	292.86	172.78	374.03	458.51	174.33	4.3	.9
1985	299.09	170.42	385.97	464.09	174.64	2.1	−1.4
1986 ᵖ	304.85	171.07	396.01	465.75	175.78	1.9	.4
1985: Jan	295.40	171.15	380.70	459.85	174.05	2.0	−1.2
Feb	295.95	170.97	378.14	466.93	174.34	2.1	−1.3
Mar	297.50	171.08	382.73	467.49	174.64	2.7	−1.2
Apr	297.35	170.30	382.45	465.79	173.46	1.4	−2.6
May	298.55	170.80	383.80	463.33	175.23	2.4	−1.5
June	299.09	170.62	385.97	458.42	174.64	2.6	−1.5
July	297.54	169.44	385.42	462.10	174.34	1.5	−2.2
Aug	299.79	170.43	388.54	463.23	174.64	2.3	−.6
Sept	300.84	170.74	389.91	466.83	175.81	2.1	−.6
Oct	301.19	170.45	391.13	467.31	174.63	2.7	−.2
Nov	301.02	169.49	391.94	461.52	174.92	2.3	−1.1
Dec	303.63	170.20	395.91	461.28	175.78	2.5	−1.1
1986: Jan	303.80	169.72	393.72	470.40	175.51	3.1	−.6
Feb	303.98	170.58	393.98	448.59	175.51	2.5	−.5
Mar	304.68	171.94	394.79	450.06	176.09	2.4	.4
Apr	303.46	171.93	393.98	465.22	174.91	2.1	.9
May	303.80	171.83	395.60	464.25	174.91	1.9	.7
June	303.28	170.67	394.23	461.15	174.60	1.1	−.2
July	302.93	170.57	395.04	463.76	175.20	1.7	.5
Aug	305.20	171.46	398.21	467.37	176.08	1.8	.6
Sept	303.97	170.49	397.39	468.61	176.66	1.0	−.3
Oct	305.36	170.78	397.64	469.88	176.06	1.4	.2
Nov ᵖ	307.98	171.86	398.62	471.85	176.95	2.0	1.1
Dec ᵖ	305.86	170.30	400.82	472.36	173.95	.7	.1

[1] Also includes other private industry groups shown in Table B–40.

[2] Earnings in current dollars divided by the consumer price index on a 1977=100 base.

[3] Based on data not seasonally adjusted.

Note.—See Note, Table B–40.

Source: Department of Labor, Bureau of Labor Statistics.

Table B–43.—*Productivity and related data, business sector, 1947–86*

[1977=100; quarterly data seasonally adjusted]

Year or quarter	Output per hour of all persons		Output [1]		Hours of all persons [2]		Compensation per hour [3]		Real compensation per hour [4]		Unit labor costs		Implicit price deflator [5]	
	Business sector	Nonfarm business sector	Business sector	Nonfarm business sector	Business sector	Nonfarm business sector	Business sector	Nonfarm business sector	Business sector	Nonfarm business sector	Business sector	Nonfarm business sector	Business sector	Nonfarm business sector
1947	44.9	51.4	36.2	35.2	80.6	68.6	16.6	18.0	45.2	48.9	37.0	35.1	35.5	34.0
1948	47.2	53.3	38.3	37.2	81.2	69.8	18.1	19.6	45.5	49.3	38.3	36.7	38.0	36.4
1949	47.7	54.2	37.4	36.4	78.5	67.0	18.4	20.2	46.7	51.3	38.5	37.2	37.8	36.9
1950	51.7	57.7	41.0	39.9	79.3	69.1	19.7	21.4	49.6	53.9	38.1	37.1	38.4	37.5
1951	53.8	59.4	43.9	43.0	81.6	72.3	21.6	23.3	50.5	54.3	40.3	39.2	40.8	39.6
1952	55.4	60.7	45.3	44.4	81.7	73.0	23.0	24.6	52.5	56.1	41.5	40.5	41.4	40.4
1953	57.5	62.1	47.4	46.4	82.5	74.8	24.6	26.0	55.6	58.8	42.7	41.9	41.7	41.1
1954	58.4	63.0	46.5	45.5	79.7	72.2	25.3	26.8	57.2	60.5	43.4	42.6	42.2	41.8
1955	60.1	64.8	49.7	48.7	82.7	75.1	26.0	27.8	58.8	62.9	43.2	42.9	43.2	43.1
1956	60.9	65.2	51.1	50.2	83.9	77.0	27.7	29.5	61.8	65.8	45.5	45.3	44.6	44.5
1957	62.5	66.5	51.7	50.9	82.7	76.6	29.5	31.2	63.6	67.2	47.2	47.0	46.2	46.1
1958	64.4	68.0	50.7	49.8	78.8	73.3	30.9	32.5	64.8	68.1	48.0	47.7	46.9	46.6
1959	66.5	70.2	54.4	53.7	81.8	76.4	32.2	33.8	67.1	70.3	48.5	48.2	47.8	47.8
1960	67.6	71.0	55.4	54.6	81.9	76.9	33.6	35.3	68.9	72.3	49.7	49.7	48.5	48.5
1961	70.0	73.2	56.5	55.7	80.7	76.0	34.9	36.5	70.8	73.8	49.9	49.8	48.8	48.8
1962	72.5	75.6	59.4	58.7	81.9	77.6	36.6	38.0	73.2	76.0	50.4	50.2	49.7	49.7
1963	75.4	78.3	62.1	61.5	82.4	78.5	37.9	39.3	75.1	77.7	50.3	50.2	50.2	50.2
1964	78.7	81.4	65.9	65.4	83.7	80.3	39.9	41.1	78.0	80.3	50.7	50.5	50.7	50.8
1965	81.0	83.4	70.0	69.5	86.4	83.3	41.5	42.5	79.6	81.6	51.2	50.9	51.9	51.9
1966	83.2	85.2	73.6	73.4	88.5	86.2	44.3	45.0	82.7	84.0	53.3	52.8	53.6	53.5
1967	85.5	87.1	75.6	75.3	88.5	86.4	46.7	47.5	84.8	86.2	54.7	54.5	54.9	55.0
1968	87.8	89.4	78.9	78.8	89.9	88.1	50.4	51.1	87.8	89.0	57.4	57.1	57.5	57.5
1969	87.8	89.0	81.1	80.9	92.3	90.9	53.9	54.4	89.1	90.0	61.4	61.2	60.4	60.4
1970	88.4	89.3	80.3	80.0	90.8	89.7	57.8	58.2	90.2	90.8	65.4	65.2	63.2	63.4
1971	91.3	91.9	82.5	82.2	90.4	89.4	61.6	62.0	92.1	92.8	67.4	67.4	66.4	66.6
1972	94.1	94.7	87.7	87.5	93.2	92.3	65.5	66.0	94.9	95.7	69.6	69.7	69.0	69.0
1973	95.9	96.4	92.9	92.9	96.9	96.3	70.9	71.2	96.7	97.1	73.9	73.9	73.4	72.3
1974	93.9	94.3	91.3	91.2	97.3	96.7	77.6	78.0	95.4	95.9	82.7	82.7	80.5	79.7
1975	95.7	96.0	89.4	89.1	93.4	92.8	85.2	85.6	95.9	96.4	89.0	89.2	88.7	88.3
1976	98.3	98.5	94.5	94.4	96.1	95.9	92.8	92.8	98.7	98.8	94.3	94.3	94.0	93.8
1977	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
1978	100.8	100.8	105.8	106.0	104.9	105.1	108.5	108.6	100.8	100.9	107.6	107.7	107.3	107.0
1979	99.6	99.3	107.9	107.9	108.3	108.7	119.1	118.9	99.4	99.2	119.5	119.7	117.0	116.5
1980	99.3	98.8	106.7	106.7	107.5	108.0	131.5	131.3	96.7	96.6	132.5	132.9	127.6	127.8
1981	100.7	99.8	108.9	108.5	108.2	108.7	143.7	143.6	95.7	95.7	142.7	144.0	139.8	140.3
1982	100.3	99.2	105.5	104.9	105.2	105.7	154.9	154.8	97.3	97.2	154.5	156.0	148.1	149.2
1983	103.0	102.4	109.9	110.1	106.7	107.5	161.5	161.5	98.2	98.2	[illegible]	157.7	153.0	154.3
1984	105.3	104.3	118.8	118.8	112.8	114.0	168.1	167.9	98.1	98.0	[illegible]	161.0	158.5	159.3
1985	106.4	104.8	122.7	122.5	115.3	116.9	175.3	174.6	98.8	98.4	164.8	166.7	163.0	164.6
1982: IV	101.0	99.7	105.0	104.2	103.9	104.5	158.3	158.2	97.9	97.8	156.8	158.7	150.2	151.4
1983: IV	103.8	103.3	113.6	114.1	109.4	110.5	163.6	163.4	98.0	97.9	157.7	158.2	155.2	156.2
1984: I	104.9	103.9	116.9	116.9	111.4	112.5	165.9	165.6	98.1	97.9	158.2	159.4	156.7	157.2
II	105.6	104.6	119.0	119.1	112.7	113.8	167.1	166.9	97.9	97.8	158.3	159.5	157.7	158.4
III	105.5	104.4	119.5	119.5	113.3	114.5	169.0	168.7	98.1	98.0	160.2	161.5	159.0	160.0
IV	105.5	104.3	120.2	120.2	114.0	115.2	170.6	170.4	98.2	98.1	161.7	163.3	160.3	161.4
1985: I	105.7	104.4	121.3	121.1	114.8	116.0	172.3	172.1	98.4	98.2	163.1	164.8	161.4	162.7
II	106.4	104.9	122.3	122.1	115.0	116.4	174.5	174.0	98.7	98.4	164.0	165.9	162.6	164.1
III	107.3	105.4	123.5	123.3	115.2	116.9	176.4	175.4	99.1	98.5	164.4	166.3	163.4	155.2
IV	106.4	104.5	123.8	123.6	116.4	118.2	178.0	177.0	99.0	98.4	167.3	169.3	164.6	166.2
1986: I	107.3	105.6	125.3	125.1	116.8	118.5	179.1	178.3	99.2	98.8	167.0	168.8	165.3	167.1
II	107.4	105.7	125.4	125.3	116.7	118.5	180.4	179.3	100.3	99.8	168.0	169.6	165.8	167.5
III	107.4	105.8	126.2	126.2	117.4	119.3	181.7	180.4	100.4	99.7	169.1	170.5	167.2	168.9

[1] Output refers to gross domestic product originating in the sector in 1982 dollars.

[2] Hours of all persons engaged in the sector, including hours of proprietors and unpaid family workers. Estimates based primarily on establishment data.

[3] Wages and salaries of employees plus employers' contributions for social insurance and private benefit plans. Also includes an estimate of wages, salaries, and supplemental payments for the self-employed.

[4] Hourly compensation divided by the consumer price index for all urban consumers.

[5] Current dollar gross domestic product divided by constant dollar gross domestic product.

Source: Department of Labor, Bureau of Labor Statistics.

TABLE B-44.—*Changes in productivity and related data, business sector, 1948–86*

[Percent change from preceding period; quarterly data at seasonally adjusted annual rates]

Year or quarter	Output per hour of all persons		Output[1]		Hours of all persons[2]		Compensation per hour[3]		Real compensation per hour[4]		Unit labor costs		Implicit price deflator[5]	
	Business sector	Nonfarm business sector	Business sector	Nonfarm business sector	Business sector	Nonfarm business sector	Business sector	Nonfarm business sector	Business sector	Nonfarm business sector	Business sector	Nonfarm business sector	Business sector	Nonfarm business sector
1948	5.0	3.8	5.9	5.6	0.8	1.7	8.5	8.5	0.7	0.8	3.3	4.6	7.2	7.2
1949	1.1	1.7	−2.3	−2.3	−3.4	−3.9	1.7	3.0	2.7	4.0	.6	1.3	−.6	1.3
1950	8.3	6.4	9.5	9.7	1.1	3.0	7.3	6.1	6.3	5.1	−.9	−.3	1.5	1.8
1951	4.0	3.0	7.1	7.7	2.9	4.6	9.8	8.7	1.7	.7	5.6	5.6	6.3	5.6
1952	3.1	2.2	3.2	3.2	.1	1.0	6.3	5.6	4.0	3.3	3.1	3.3	1.3	2.0
1953	3.6	2.2	4.6	4.6	.9	2.4	6.7	5.7	5.9	4.9	3.0	3.5	.7	1.8
1954	1.6	1.5	−1.8	−2.0	−3.4	−3.4	3.2	3.3	2.8	2.8	1.6	1.8	1.2	1.5
1955	3.0	2.9	6.9	7.1	3.7	4.0	2.5	3.6	2.9	4.0	−.5	.7	2.6	3.2
1956	1.3	.6	2.8	3.1	1.5	2.5	6.7	6.2	5.1	4.6	5.3	5.5	3.2	3.3
1957	2.6	1.9	1.1	1.3	−1.5	−.6	6.5	5.7	3.0	2.2	3.8	3.8	3.5	3.6
1958	3.0	2.4	−1.8	−2.0	−4.7	−4.3	4.6	4.1	1.8	1.3	1.6	1.6	1.6	1.2
1959	3.3	3.2	7.3	7.7	3.8	4.3	4.4	4.1	3.5	3.3	1.0	.9	2.0	2.5
1960	1.7	1.1	1.8	1.7	.1	.6	4.3	4.4	2.7	2.8	2.6	3.3	1.4	1.4
1961	3.5	3.1	1.9	2.0	−1.6	−1.1	3.9	3.3	2.8	2.2	.3	.1	.5	.6
1962	3.6	3.3	5.2	5.5	1.6	2.1	4.7	4.1	3.5	2.9	1.1	.8	1.9	2.0
1963	4.0	3.6	4.6	4.7	.6	1.1	3.8	3.5	2.5	2.3	−.2	−.1	.9	.9
1964	4.3	3.9	6.0	6.3	1.6	2.3	5.2	4.6	3.8	3.3	.8	.7	1.0	1.2
1965	3.0	2.5	6.3	6.4	3.2	3.8	3.8	3.4	2.1	1.7	.9	.8	2.3	2.0
1966	2.8	2.1	5.2	5.6	2.4	3.4	6.9	5.9	3.9	2.9	4.1	3.7	3.3	3.1
1967	2.7	2.3	2.7	2.5	−.0	.3	5.4	5.5	2.5	2.6	2.6	3.2	2.5	2.9
1968	2.7	2.6	4.4	4.7	1.7	2.0	7.9	7.6	3.5	3.2	5.0	4.8	4.6	4.6
1969	.1	−.5	2.7	2.7	2.6	3.2	7.0	6.6	1.6	1.1	6.9	7.1	5.1	5.0
1970	.7	.3	−.9	−1.1	−1.6	−1.3	7.3	7.0	1.2	.9	6.5	6.7	4.7	4.9
1971	3.2	3.0	2.7	2.7	−.5	−.3	6.4	6.5	2.1	2.1	3.1	3.4	4.9	5.0
1972	3.0	3.1	6.3	6.4	3.1	3.3	6.4	6.5	3.0	3.1	3.3	3.4	4.0	3.6
1973	2.0	1.8	6.0	6.2	3.9	4.3	8.3	7.9	1.9	1.5	6.2	6.0	6.4	4.8
1974	−2.1	−2.2	−1.8	−1.8	.4	.4	9.5	9.6	−1.3	−1.3	11.9	12.0	9.6	10.2
1975	2.0	1.8	−2.1	−2.3	−4.0	−4.0	9.7	9.7	.5	.5	7.6	7.8	10.3	10.8
1976	2.8	2.6	5.8	6.0	2.9	3.4	8.9	8.4	2.9	2.5	5.9	5.7	5.9	6.3
1977	1.7	1.6	5.8	5.9	4.0	4.3	7.8	7.7	1.3	1.2	6.0	6.1	6.4	6.6
1978	.8	.8	5.8	6.0	4.9	5.1	8.5	8.6	.8	.9	7.6	7.7	7.3	7.0
1979	−1.2	−1.6	2.0	1.9	3.2	3.5	9.7	9.5	−1.4	−1.6	11.1	11.2	9.0	8.9
1980	−.3	−.4	−1.1	−1.2	−.8	−.7	10.5	10.5	−2.7	−2.7	10.9	11.0	9.0	9.7
1981	1.4	1.0	2.1	1.7	.7	.7	9.2	9.4	−1.0	−.9	7.7	8.3	9.6	9.7
1982	−.4	−.6	−3.1	−3.3	−2.8	−2.7	7.8	7.8	1.6	1.5	8.3	8.4	5.9	6.3
1983	2.7	3.3	4.2	4.9	1.5	1.6	4.2	4.3	1.0	1.1	1.5	1.1	3.3	3.5
1984	2.3	1.8	8.1	8.0	5.7	6.0	4.1	4.0	−.1	−.3	1.8	2.1	3.5	3.2
1985	1.0	.5	3.3	3.0	2.2	2.6	4.3	4.0	.7	.4	3.2	3.5	2.9	3.3
1982: IV	3.0	2.4	−.5	−1.2	−3.4	−3.5	4.5	5.1	2.9	3.4	1.5	2.6	2.4	3.0
1983: IV	2.8	1.3	10.4	9.8	7.3	8.4	5.3	4.4	1.1	.1	2.4	3.0	4.8	3.1
1984: I	4.4	2.4	12.2	10.2	7.4	7.6	5.7	5.4	.5	.3	1.2	3.0	4.0	2.7
II	2.6	2.9	7.5	7.7	4.8	4.7	2.8	3.2	−.8	−.4	.2	.3	2.6	3.1
III	−.3	−.7	1.7	1.6	2.1	2.3	4.6	4.3	.8	.4	5.0	5.1	3.4	4.0
IV	−.1	−.4	2.5	2.2	2.6	2.6	3.8	4.2	.1	.5	3.9	4.6	3.2	3.7
1985: I	.9	.3	3.6	3.2	2.6	2.9	4.2	3.9	1.0	.7	3.3	3.6	2.7	3.2
II	2.7	1.8	3.3	3.0	.6	1.2	5.1	4.6	1.0	.5	2.4	2.7	3.0	3.4
III	3.4	2.2	4.1	4.0	.7	1.8	4.4	3.2	1.8	.7	1.0	1.0	1.9	2.6
IV	−3.2	−3.5	1.0	1.0	4.3	4.6	3.8	3.7	−.5	−.6	7.2	7.4	3.0	2.4
1986: I	3.3	4.3	4.7	5.1	1.4	.8	2.5	3.1	1.0	1.6	−.7	−1.2	1.8	2.3
II	.5	.5	.3	.6	−.2	.1	2.8	2.3	4.5	4.0	2.3	1.8	1.2	1.0
III	.2	.2	2.5	3.0	2.3	2.8	2.9	2.3	.3	−.2	2.7	2.2	3.4	3.3

[1] Output refers to gross domestic product originating in the sector in 1982 dollars.

[2] Hours of all persons engaged in the sector, including hours of proprietors and unpaid family workers. Estimates based primarily on establishment data.

[3] Wages and salaries of employees plus employers' contributions for social insurance and private benefit plans. Also includes an estimate of wages, salaries, and supplemental payments for the self-employed.

[4] Hourly compensation divided by the consumer price index for all urban consumers.

[5] Current dollar gross domestic product divided by constant dollar gross domestic product.

Note.—Data relate to all persons engaged in the sector. Percent changes are based on original data and therefore may differ slightly from percent changes based on indexes in Table B-43.

Source: Department of Labor, Bureau of Labor Statistics.

PRODUCTION AND BUSINESS ACTIVITY

TABLE B-45.—*Industrial production indexes, major industry divisions, 1939–86*

[1977 = 100; monthly data seasonally adjusted]

Year or month	Total industrial production	Manufacturing			Mining	Utilities
		Total	Durable	Nondurable		
1977 proportion	100.00	84.21	49.10	35.11	9.83	5.96
1939	16.0	15.8	13.6	17.9	37.6	6.9
1940	18.4	18.6	18.1	18.8	41.8	7.6
1941	23.3	23.8	24.2	22.7	44.4	8.6
1942	26.7	27.7	30.7	23.7	45.7	9.7
1943	32.4	34.5	41.8	25.4	46.8	10.7
1944	34.9	37.3	46.1	26.4	50.2	11.4
1945	29.9	31.2	34.9	26.3	49.2	11.6
1946	25.8	25.9	24.4	27.1	48.3	12.0
1947	29.0	28.9	29.0	28.2	54.6	13.0
1948	30.2	30.0	30.3	29.2	57.4	14.5
1949	28.6	28.3	27.5	28.7	50.9	15.5
1950	33.1	33.0	33.5	31.9	56.9	17.6
1951	35.9	35.6	37.7	33.0	62.4	20.1
1952	37.2	37.1	40.0	33.6	61.9	21.8
1953	40.4	40.4	45.2	35.0	63.5	23.6
1954	38.2	37.8	39.9	35.2	62.3	25.4
1955	43.0	42.6	45.6	39.1	69.5	28.4
1956	44.9	44.4	47.1	41.1	73.1	31.2
1957	45.5	44.9	47.4	41.8	73.2	33.3
1958	42.6	41.7	41.5	42.1	67.1	34.9
1959	47.7	47.0	47.7	46.3	70.2	38.4
1960	48.8	48.0	48.5	47.4	71.6	41.1
1961	49.1	48.1	47.6	48.8	72.1	43.4
1962	53.2	52.4	52.8	51.8	74.1	46.6
1963	56.3	55.5	56.3	54.6	77.1	49.8
1964	60.1	59.3	60.3	58.2	80.2	54.1
1965	66.1	65.7	68.6	62.1	83.1	57.4
1966	72.0	71.7	76.2	66.0	87.6	61.8
1967	73.5	73.1	77.0	68.1	89.3	64.9
1968	77.6	77.2	80.8	72.5	92.7	70.2
1969	81.2	80.6	84.0	76.3	96.4	76.4
1970	78.5	77.0	77.6	76.3	98.9	81.1
1971	79.6	78.2	77.3	79.4	96.4	85.0
1972	87.3	86.4	86.3	86.5	98.4	90.4
1973	94.4	94.0	96.3	90.8	99.3	94.0
1974	93.0	92.6	94.3	90.2	98.8	92.8
1975	84.8	83.4	82.6	84.5	96.6	93.7
1976	92.6	91.9	91.1	93.1	97.4	97.4
1977	100.0	100.0	100.0	100.0	100.0	100.0
1978	106.5	107.1	108.2	105.5	103.6	103.1
1979	110.7	111.5	113.9	108.2	106.4	105.9
1980	108.6	108.2	109.1	107.0	112.4	107.3
1981	111.0	110.5	111.1	109.7	117.5	107.1
1982	103.1	102.2	99.9	105.5	109.3	104.8
1983	109.2	110.2	107.7	113.7	102.9	105.2
1984	121.4	123.4	124.2	122.3	111.1	110.7
1985	123.8	126.3	127.3	125.1	108.8	111.9
1986 ^{p}	125.1	129.2	128.0	130.9	99.6	109.7
1985: Jan	122.7	125.0	126.6	122.6	110.0	113.3
Feb	123.2	125.2	126.4	123.5	110.0	116.1
Mar	123.4	125.8	127.3	123.7	110.2	112.7
Apr	123.3	126.1	127.5	124.1	109.7	109.7
May	123.6	126.3	127.4	124.7	109.5	109.7
June	123.6	126.1	127.0	124.8	110.6	109.5
July	123.4	126.3	126.9	125.4	107.5	110.0
Aug	124.4	127.2	128.1	126.0	108.1	110.0
Sept	124.3	127.0	127.4	126.4	108.2	113.3
Oct	123.6	126.3	126.7	125.8	106.9	111.8
Nov	124.8	127.8	128.2	127.2	106.9	111.9
Dec	125.6	128.2	128.7	127.5	107.4	114.8
1986: Jan	126.2	129.4	129.5	129.3	108.1	112.5
Feb	125.3	128.7	128.7	128.7	105.1	109.7
Mar	123.6	127.2	126.8	127.7	103.0	109.3
Apr	124.7	128.7	128.1	129.6	101.0	109.4
May	124.2	128.2	127.0	129.9	99.8	108.5
June	124.2	128.3	126.2	131.2	98.9	108.6
July	124.9	129.2	127.4	131.7	97.1	109.7
Aug	125.1	129.5	127.5	132.2	96.4	108.3
Sept	124.9	129.5	128.1	131.4	96.2	108.3
Oct	125.3	129.9	128.2	132.3	95.9	109.5
Nov ^{p}	126.0	130.5	128.7	133.1	96.6	110.9
Dec ^{p}	126.6	131.4	129.6	133.8	97.0	110.6

Source: Board of Governors of the Federal Reserve System.

TABLE B–46.—*Industrial production indexes, market groupings, 1947–86*

[1977 = 100; monthly data seasonally adjusted]

Year or month	Total industrial production	Final products							Intermediate products	Materials		
		Total	Consumer goods			Equipment				Total[3]	Durable goods	Nondurable goods
			Total[1]	Automotive products	Home goods	Total[2]	Business	Defense and space				
1977 proportion	100.00	44.77	25.52	2.98	3.91	19.25	14.34	3.67	12.94	42.28	20.50	10.09
1947	29.0	29.0	29.9	25.8	26.1	....	25.9	15.2	29.9	28.8	28.5	....
1948	30.2	30.1	30.8	27.0	27.2	....	27.0	17.8	31.6	30.0	29.3	....
1949	28.6	29.1	30.6	26.7	25.2	....	23.6	18.6	29.9	27.3	26.3	....
1950	33.1	32.9	35.0	33.6	34.7	....	25.2	21.9	34.8	32.7	33.1	....
1951	35.9	35.5	34.6	29.8	29.9	....	30.8	53.8	36.5	36.2	37.6	....
1952	37.2	38.1	35.4	26.8	29.9	....	34.9	75.7	36.3	36.7	38.4	....
1953	40.4	40.7	37.5	33.9	33.9	....	36.3	90.6	38.8	40.8	44.9	....
1954	38.2	38.5	37.3	31.5	31.3	....	31.9	79.8	38.7	37.7	38.7	29.1
1955	43.0	41.6	41.6	41.9	36.9	....	34.6	73.1	43.9	44.6	47.4	33.3
1956	44.9	44.1	43.1	34.5	38.8	....	40.1	71.4	45.9	45.7	47.6	34.8
1957	45.5	45.4	44.2	36.1	38.0	....	41.7	74.6	45.9	45.7	47.5	34.7
1958	42.6	43.3	43.8	28.7	35.8	....	35.2	74.9	44.9	41.1	40.0	34.5
1959	47.7	47.5	48.0	36.0	41.1	....	39.5	78.9	49.6	47.4	47.7	39.4
1960	48.8	49.1	49.8	41.2	41.4	....	40.6	81.1	49.9	48.1	48.3	40.1
1961	49.1	49.5	50.9	37.6	42.7	....	39.4	82.4	50.9	48.1	47.1	41.7
1962	53.2	53.7	54.3	45.6	46.4	....	42.8	95.4	54.0	52.4	52.4	45.2
1963	56.3	56.7	57.3	49.9	50.0	....	44.9	102.9	57.0	55.8	55.9	47.9
1964	60.1	59.9	60.5	52.3	54.6	....	50.3	99.6	60.7	60.3	60.9	52.1
1965	66.1	65.8	65.3	64.4	61.9	....	57.6	110.3	64.6	67.2	69.8	57.2
1966	72.0	72.1	68.6	64.2	68.2	....	66.7	129.6	68.6	73.2	76.9	61.8
1967	73.5	75.0	70.3	56.4	69.1	....	68.0	147.8	71.4	72.5	74.2	62.9
1968	77.6	78.5	74.5	67.2	74.0	....	71.0	148.1	75.5	77.3	78.6	69.1
1969	81.2	81.1	77.3	67.5	78.9	....	75.6	141.0	79.6	81.9	82.7	74.8
1970	78.5	78.2	76.4	56.8	76.5	....	72.9	119.4	78.4	79.0	75.1	75.2
1971	79.6	78.9	80.8	72.4	81.0	....	69.3	107.3	80.8	80.2	75.4	78.4
1972	87.3	85.6	87.3	78.1	92.7	83.8	79.0	104.3	90.2	88.4	85.2	86.4
1973	94.4	92.0	91.2	86.2	98.1	93.6	92.4	101.9	96.0	96.8	97.4	92.7
1974	93.0	91.7	88.4	74.5	90.7	96.6	96.5	100.4	92.6	94.8	94.6	93.2
1975	84.8	86.3	84.9	70.2	79.9	88.5	86.1	98.5	83.6	83.2	78.8	82.9
1976	92.6	92.4	93.3	87.1	89.5	91.5	89.3	100.1	92.1	93.0	90.8	93.9
1977	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
1978	106.5	106.9	104.3	102.4	104.7	110.3	112.2	101.2	106.9	105.9	108.8	105.6
1979	110.7	111.0	103.9	94.9	103.7	120.4	124.7	105.6	110.8	110.3	114.4	109.3
1980	108.6	112.2	102.7	76.1	97.7	124.7	125.1	115.4	106.9	105.3	106.1	103.4
1981	111.0	115.2	104.1	78.8	98.1	129.9	127.6	119.8	107.3	107.7	109.7	107.1
1982	103.1	109.5	101.4	78.1	86.5	120.2	113.6	133.0	101.7	96.7	94.2	96.6
1983	109.2	114.7	109.3	95.1	101.1	121.7	115.4	143.1	111.2	102.8	103.7	106.2
1984	121.4	127.3	118.0	109.4	114.3	139.6	134.2	156.4	124.7	114.2	121.5	111.4
1985	123.8	131.1	120.2	114.0	112.2	145.4	139.6	170.6	130.0	114.2	121.4	112.2
1986 ^{p}	125.1	132.4	124.5	114.9	116.8	142.9	138.8	180.2	136.3	113.9	119.7	118.2
1985: Jan	122.7	129.0	118.0	113.9	109.1	143.6	138.3	163.2	126.3	114.8	123.6	110.4
Feb	123.2	129.9	119.1	114.1	111.3	144.3	139.2	164.2	127.2	114.9	122.4	110.9
Mar	123.4	130.0	119.3	113.2	113.8	144.2	138.9	166.0	128.1	115.0	122.9	110.8
Apr	123.3	130.3	118.9	111.9	111.4	145.4	140.7	167.1	128.7	114.1	122.2	110.5
May	123.6	131.0	119.7	112.7	111.4	146.0	140.8	168.3	130.1	113.8	120.8	111.1
June	123.6	130.5	119.9	112.6	112.7	144.6	138.5	169.9	130.9	114.1	121.2	111.5
July	123.4	130.6	119.4	113.0	110.3	145.6	139.5	170.8	130.6	113.6	120.1	113.3
Aug	124.4	132.2	120.9	118.6	111.4	147.1	141.0	173.3	131.7	113.9	121.2	112.7
Sept	124.3	132.2	121.1	116.2	110.7	146.9	140.4	174.5	131.3	113.8	119.9	114.2
Oct	123.6	131.0	120.5	113.2	111.6	144.9	138.3	174.8	131.2	113.4	120.1	113.6
Nov	124.8	133.1	122.7	115.6	115.3	147.0	140.8	177.2	131.8	113.9	121.2	113.3
Dec	125.6	133.2	123.3	113.9	116.4	146.4	140.0	178.5	132.0	115.4	121.9	114.9
1986: Jan	126.2	133.9	123.8	116.2	115.8	147.5	141.5	178.7	134.2	115.5	122.2	116.2
Feb	125.3	132.8	123.3	117.6	115.8	145.4	140.5	176.3	133.4	114.8	121.3	116.1
Mar	123.6	130.6	121.8	110.4	113.9	142.3	137.7	176.2	133.3	113.3	119.3	114.8
Apr	124.7	132.1	124.5	116.4	115.5	142.3	138.6	178.0	134.5	113.8	120.2	116.5
May	124.2	131.6	124.3	113.2	114.3	141.2	137.9	178.0	135.1	113.0	118.4	116.5
June	124.2	131.1	124.4	113.7	114.8	140.0	136.6	178.4	137.0	113.1	117.8	117.7
July	124.9	132.0	125.2	116.4	116.3	141.0	137.9	179.5	137.3	113.6	118.8	118.9
Aug	125.1	132.6	125.1	114.5	116.7	142.5	139.3	181.0	137.8	113.2	118.8	119.7
Sept	124.9	132.2	124.2	117.0	117.7	142.8	139.3	182.0	137.0	113.5	118.9	120.6
Oct	125.3	132.7	124.9	112.7	119.7	143.1	139.2	183.6	138.4	113.4	119.0	120.4
Nov ^{p}	126.0	133.4	125.8	113.2	120.5	143.5	139.2	184.5	138.5	114.5	120.6	120.3
Dec ^{p}	126.6	134.2	126.9	117.0	121.2	143.9	139.3	186.2	139.2	114.7	120.5	121.3

[1] Includes clothing and consumer staples, not shown separately.

[2] Two components—oil and gas well drilling and manufactured homes—are included in total equipment, but not in detail shown.

[3] Includes energy materials, not shown separately.

Source: Board of Governors of the Federal Reserve System.

TABLE B–47.—*Industrial production indexes, selected manufactures, 1947–86*

[1977 = 100; monthly data seasonally adjusted]

Year or month	Durable manufactures								Nondurable manufactures			
	Primary metals		Fabricated metal products	Nonelectrical machinery	Electrical machinery	Transportation equipment		Lumber and products	Apparel products	Printing and publishing	Chemicals and products	Foods
	Total	Iron and steel				Total	Motor vehicles and parts					
1977 proportion	5.33	3.49	6.46	9.54	7.15	9.13	5.25	2.30	2.79	4.54	8.05	7.96
1947	57.8	70.4	40.4	26.7	14.5	26.6	28.8	47.2	47.0	34.3	10.4	41.9
1948	60.1	73.6	41.2	26.8	15.1	29.0	31.2	49.1	49.1	36.0	11.3	41.5
1949	50.5	62.9	37.2	22.9	14.1	29.2	32.0	43.3	48.6	37.0	11.1	41.9
1950	63.6	77.5	45.5	25.7	19.4	34.9	41.2	52.7	52.3	38.8	13.9	43.4
1951	69.2	86.6	48.6	32.6	19.5	38.9	37.8	52.5	51.3	39.5	15.7	44.3
1952	63.2	76.2	47.4	35.5	22.3	45.2	32.4	51.8	54.0	39.4	16.5	45.2
1953	71.6	87.9	53.5	36.9	25.6	56.8	40.8	54.8	54.7	41.2	17.8	46.1
1954	57.9	68.3	48.2	31.6	22.8	49.4	35.1	54.5	54.1	42.9	18.1	47.0
1955	75.3	90.8	55.0	34.6	26.1	56.8	47.1	60.8	59.7	47.2	21.1	49.8
1956	74.8	89.1	55.8	39.7	28.3	55.1	38.2	60.1	61.1	50.2	22.6	52.6
1957	71.6	85.9	57.2	39.6	28.1	59.0	40.1	55.2	60.9	51.9	23.9	53.4
1958	56.8	64.7	51.3	33.2	25.7	46.5	29.6	56.0	59.2	50.7	24.7	54.7
1959	66.4	74.5	57.6	38.8	31.2	52.7	38.5	63.6	65.2	54.1	28.8	57.4
1960	66.1	75.7	57.6	39.0	33.8	54.6	43.4	59.8	66.5	56.3	29.9	59.0
1961	64.9	72.3	56.2	37.9	35.9	51.3	38.1	62.6	66.9	56.5	31.4	60.7
1962	69.6	75.3	61.1	42.5	41.3	59.3	46.3	66.1	69.6	58.6	34.8	62.6
1963	75.1	82.1	63.1	45.4	42.4	65.1	51.3	69.2	72.5	61.7	38.1	64.9
1964	84.7	93.4	67.0	51.7	44.9	66.8	52.7	74.3	75.0	65.5	41.7	67.8
1965	93.2	102.4	73.6	58.2	53.5	79.4	67.3	77.2	79.3	69.7	46.5	69.4
1966	98.9	105.5	78.8	67.6	64.2	85.1	66.2	80.1	81.3	75.0	50.7	72.0
1967	91.4	97.5	82.5	68.9	64.5	83.2	58.2	79.3	80.9	79.1	53.0	75.2
1968	94.7	100.7	86.9	69.5	68.1	90.4	69.7	81.6	82.9	80.4	59.6	77.2
1969	101.9	109.7	88.4	75.2	72.5	89.7	70.0	81.5	85.6	84.3	64.5	79.8
1970	94.8	102.1	81.9	72.8	69.3	75.3	56.3	81.1	82.2	82.0	67.1	81.0
1971	89.9	93.4	81.5	67.6	69.6	81.5	70.6	83.2	83.2	82.7	71.4	83.6
1972	100.7	103.8	89.4	78.5	79.7	87.0	77.1	95.3	88.3	88.2	80.3	88.0
1973	114.3	118.2	99.4	91.7	90.7	99.1	89.8	95.6	89.0	90.6	87.8	89.8
1974	110.7	114.5	95.4	97.7	89.8	90.1	77.5	86.8	85.0	89.2	91.0	91.0
1975	88.2	92.0	82.7	84.5	77.2	81.0	65.7	80.8	77.6	83.5	82.9	90.4
1976	98.7	101.4	91.6	88.8	86.8	92.2	86.5	91.9	91.5	91.2	92.8	95.6
1977	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
1978	107.0	107.5	105.7	111.7	112.9	106.3	104.6	102.4	103.1	107.8	106.8	104.3
1979	108.5	108.0	109.4	122.6	125.7	108.3	95.9	102.0	98.3	112.7	111.4	106.7
1980	90.4	86.3	101.8	123.3	130.3	96.9	71.1	92.9	97.3	115.1	106.4	111.4
1981	95.0	92.5	101.6	129.8	134.1	95.1	71.6	90.1	96.1	118.6	112.6	113.7
1982	65.8	57.5	86.6	115.6	128.4	87.6	66.8	82.8	87.3	120.2	103.8	114.9
1983	73.0	66.1	89.1	118.3	143.8	99.2	85.8	100.2	95.3	129.8	114.0	120.4
1984	82.3	73.4	102.6	141.8	170.5	112.2	104.4	109.1	102.7	146.5	121.6	126.9
1985	80.5	70.4	107.3	145.3	168.4	121.4	111.5	113.4	100.9	153.9	127.1	130.2
1986 ^{p}	76.0	....	107.4	142.3	166.5	125.9	110.9	....	....	163.5	....	....
1985: Jan	80.9	70.3	106.5	144.4	172.8	118.9	112.3	109.2	100.7	149.2	125.2	126.9
Feb	80.2	69.1	106.5	145.4	172.3	117.9	110.0	109.0	101.5	149.7	125.8	128.6
Mar	82.3	73.9	107.4	145.9	173.2	118.7	109.8	110.6	100.1	151.3	126.4	128.4
Apr	79.8	69.8	108.9	148.5	168.3	119.2	110.2	111.8	99.2	152.9	126.7	129.8
May	77.1	66.1	107.7	148.2	169.2	119.7	110.2	113.3	99.4	156.0	126.9	130.4
June	78.9	68.7	106.6	144.2	169.6	120.4	110.2	114.4	98.3	154.7	126.8	130.7
July	78.5	67.7	106.4	145.4	165.5	121.5	111.9	113.8	99.9	154.3	127.2	130.5
Aug	82.3	72.3	107.4	145.4	165.8	125.0	115.6	115.3	100.0	155.8	127.9	131.5
Sept	80.8	70.3	106.7	144.2	164.5	124.5	113.7	116.0	101.8	153.4	129.1	132.2
Oct	81.9	72.4	107.9	141.7	164.2	123.3	111.4	116.2	102.1	154.5	127.3	129.4
Nov	82.9	73.9	107.6	144.8	166.9	124.8	112.6	115.0	103.8	156.8	128.2	131.5
Dec	81.7	71.6	108.2	146.2	168.7	124.0	111.4	116.1	104.5	157.6	128.1	132.1
1986: Jan	82.4	72.2	109.2	144.9	166.1	128.2	116.5	120.5	105.5	160.9	131.7	132.0
Feb	80.3	69.5	108.5	143.9	164.8	127.5	116.4	120.3	102.8	156.7	132.0	132.9
Mar	76.3	64.3	107.6	141.7	165.2	122.6	108.1	120.7	102.8	157.8	130.2	132.2
Apr	78.1	65.6	108.2	140.8	166.8	126.2	112.6	121.3	103.1	161.6	132.8	133.1
May	74.8	60.2	106.5	141.3	166.0	124.1	108.7	121.6	102.6	161.9	131.5	133.7
June	71.4	58.3	106.6	140.4	163.2	125.1	110.6	120.9	101.7	164.0	134.2	134.6
July	73.6	61.7	105.7	142.6	166.8	125.6	111.2	120.8	102.5	165.4	134.1	134.3
Aug	73.4	60.8	105.9	142.6	167.2	125.1	108.2	122.5	102.5	164.6	134.4	135.1
Sept	74.1	61.1	107.3	140.9	166.9	127.7	112.2	125.0	102.7	163.0	133.9	134.3
Oct	74.2	62.2	108.0	142.9	167.8	125.2	107.1	124.8	104.1	168.0	134.2	133.5
Nov ^{p}	76.8	64.6	107.5	142.6	167.9	125.7	107.8	....	105.7	167.8	134.2	134.5
Dec ^{p}	75.9	....	108.1	142.9	169.7	127.8	11.5	....	....	168.6	....	....

Source: Board of Governors of the Federal Reserve System.

TABLE B–48.—*Capacity utilization rates, 1948–86*

[Percent; monthly data seasonally adjusted]

Year or month	Total industry	Manufacturing					Mining	Utilities	Industrial materials
		Total	Durable goods	Non-durable goods	Primary processing	Advanced processing			
1948	...	82.5	...	...	87.3	80.0	...	...	...
1949	...	74.2	...	...	76.2	73.2	...	...	...
1950	...	82.8	...	...	88.5	79.8	...	...	...
1951	...	85.8	...	...	90.2	83.4	...	...	...
1952	...	85.4	...	...	84.9	85.9	...	...	...
1953	...	89.3	...	...	89.4	89.3	...	...	...
1954	...	80.1	...	...	80.6	80.0	...	...	...
1955	...	87.0	...	...	92.0	84.2	...	...	...
1956	...	86.1	...	...	89.4	84.4	...	...	...
1957	...	83.6	...	...	84.7	83.1	...	...	...
1958	...	75.0	...	...	75.4	74.9	...	...	...
1959	...	81.6	...	...	83.0	81.1	...	...	...
1960	...	80.1	...	...	79.8	80.5	...	...	...
1961	...	77.3	...	...	77.9	77.2	...	...	...
1962	...	81.4	...	...	81.5	81.6	...	...	...
1963	...	83.5	...	...	83.8	83.4	...	...	...
1964	...	85.6	...	...	87.8	84.6	...	...	...
1965	...	89.5	...	...	91.0	88.8	...	...	...
1966	...	91.1	...	...	91.4	91.1	...	...	...
1967	87.1	86.7	87.0	86.7	85.3	87.6	82.9	93.2	85.1
1968	87.4	87.0	86.7	87.7	86.9	87.0	84.6	93.9	86.8
1969	87.4	86.7	86.1	88.0	87.7	86.1	87.0	95.6	88.1
1970	80.9	79.2	76.1	83.9	80.9	78.3	89.0	95.1	81.8
1971	79.0	77.4	73.3	83.5	79.5	76.1	87.3	93.7	80.4
1972	84.0	82.8	79.7	87.4	86.4	81.1	90.2	94.5	86.0
1973	87.9	87.0	86.2	88.1	91.3	85.1	91.4	92.8	91.1
1974	83.6	82.6	81.6	84.2	85.4	81.5	91.1	86.8	86.1
1975	74.1	72.3	69.6	76.3	72.2	72.6	89.2	84.3	73.4
1976	78.8	77.4	74.8	81.4	79.3	76.8	89.7	85.3	80.3
1977	82.4	81.4	79.4	84.5	83.1	80.5	89.9	85.1	84.1
1978	84.8	84.2	82.9	86.1	86.0	83.1	90.3	85.0	86.3
1979	85.2	84.6	84.1	85.3	86.6	83.5	90.7	85.6	87.1
1980	80.9	79.3	77.9	81.3	77.9	80.0	93.2	85.4	81.1
1981	79.9	78.3	76.7	80.7	78.1	78.3	92.9	84.2	81.1
1982	72.1	70.3	66.9	75.5	67.6	71.7	83.4	81.4	71.7
1983	74.7	74.0	70.3	79.5	74.2	73.9	77.9	80.5	75.3
1984	81.0	80.5	78.6	83.4	81.6	80.0	84.0	83.6	82.0
1985	80.4	80.1	78.2	83.0	82.1	79.2	82.1	83.1	80.2
1986 ᵖ	79.4	79.8	74.3	85.4	83.5	78.1	75.4	79.9	78.5
1985: Jan	80.6	80.2	78.8	82.4	81.5	79.5	83.0	85.0	81.4
Feb	80.8	80.2	78.4	82.8	81.3	79.6	83.1	87.0	81.3
Mar	80.8	80.4	78.8	82.7	81.7	79.6	83.3	84.3	81.2
Apr	80.5	80.4	78.7	82.8	81.9	79.7	82.8	81.9	80.5
May	80.5	80.3	78.5	83.0	81.4	79.8	82.7	81.7	80.1
June	80.4	80.0	78.0	82.9	81.6	79.2	83.5	81.4	80.2
July	80.1	79.9	77.8	83.1	82.0	79.0	81.2	81.6	79.7
Aug	80.6	80.3	78.4	83.3	82.5	79.3	81.6	81.5	79.8
Sept	80.3	80.0	77.8	83.3	82.5	78.9	81.7	83.8	79.5
Oct	79.7	79.4	77.2	82.7	82.8	77.9	80.7	82.6	79.1
Nov	80.3	80.1	77.9	83.5	82.8	78.9	80.7	82.5	79.4
Dec	80.6	80.2	78.1	83.5	83.0	79.0	81.1	84.5	80.3
1986: Jan	80.9	80.8	78.4	84.5	84.4	79.2	81.6	82.7	80.1
Feb	80.2	80.2	77.7	83.9	83.6	78.6	79.4	80.4	79.6
Mar	79.0	79.1	76.5	83.0	82.4	77.4	77.9	80.1	78.5
Apr	79.5	79.9	77.1	84.1	83.2	78.5	76.4	80.0	78.7
May	79.1	79.4	76.3	84.1	82.9	78.0	75.5	79.3	78.1
June	79.0	79.3	75.7	84.7	82.7	77.7	74.9	79.2	78.0
July	79.2	79.7	76.3	84.8	82.9	78.4	73.5	79.9	78.3
Aug	79.2	79.7	76.2	85.0	83.2	78.0	73.1	78.8	77.9
Sept	79.0	79.6	76.4	84.3	83.7	77.6	72.9	78.7	78.1
Oct	79.1	79.7	76.4	84.7	83.7	77.9	72.8	79.4	77.9
Nov ᵖ	79.4	79.9	76.5	85.0	84.2	77.9	73.4	80.3	78.5
Dec ᵖ	79.6	80.3	76.9	85.2	84.6	78.3	73.7	80.0	78.6

Source: Board of Governors of the Federal Reserve System.

TABLE B–49.—*New construction activity, 1929–86*

[Value put in place, billions of dollars; monthly data at seasonally adjusted annual rates]

Year or month	Total new construction	Private construction							Public construction		
		Total	Residential buildings [1]		Nonresidential buildings and other construction [1]				Total	Federal	State and local [5]
			Total [2]	New housing units	Total	Commercial [3]	Industrial	Other [4]			
1929	10.8	8.3	3.6	3.0	4.7	1.1	0.9	2.6	2.5	0.2	2.3
1933	2.9	1.2	.5	.3	.8	.1	.2	.5	1.6	.5	1.1
1939	8.2	4.4	2.7	2.3	1.7	.3	.3	1.2	3.8	.8	3.1
1940	8.7	5.1	3.0	2.6	2.1	.3	.4	1.3	3.6	1.2	2.4
1941	12.0	6.2	3.5	3.0	2.7	.4	.8	1.5	5.8	3.8	2.0
1942	14.1	3.4	1.7	1.4	1.7	.2	.3	1.2	10.7	9.3	1.3
1943	8.3	2.0	.9	.7	1.1	.0	.2	.9	6.3	5.6	.7
1944	5.3	2.2	.8	.6	1.4	.1	.2	1.1	3.1	2.5	.6
1945	5.8	3.4	1.3	.7	2.1	.2	.6	1.3	2.4	1.7	.7
1946	14.3	12.1	6.2	4.8	5.8	1.2	1.7	3.0	2.2	.9	1.4
New series											
1947	20.0	16.7	9.9	7.8	6.9	1.0	1.7	4.2	3.3	.8	2.5
1948	26.1	21.4	13.1	10.5	8.2	1.4	1.4	5.5	4.7	1.2	3.5
1949	26.7	20.5	12.4	10.0	8.0	1.2	1.0	5.9	6.3	1.5	4.8
1950	33.6	26.7	18.1	15.6	8.6	1.4	1.1	6.1	6.9	1.6	5.2
1951	35.4	26.2	15.9	13.2	10.3	1.5	2.1	6.7	9.3	3.0	6.3
1952	36.8	26.0	15.8	12.9	10.2	1.1	2.3	6.8	10.8	4.2	6.6
1953	39.1	27.9	16.6	13.4	11.3	1.8	2.2	7.3	11.2	4.1	7.1
1954	41.4	29.7	18.2	14.9	11.5	2.2	2.0	7.2	11.7	3.4	8.3
1955	46.5	34.8	21.9	18.2	12.9	3.2	2.4	7.3	11.7	2.8	8.9
1956	47.6	34.9	20.2	16.1	14.7	3.6	3.1	8.0	12.7	2.7	10.0
1957	49.1	35.1	19.0	14.7	16.1	3.6	3.6	9.0	14.1	3.0	11.1
1958	50.0	34.6	19.8	15.4	14.8	3.6	2.4	8.8	15.5	3.4	12.1
1959	55.4	39.3	24.3	19.2	15.1	3.9	2.1	9.0	16.1	3.7	12.3
1960	54.7	38.9	23.0	17.3	15.9	4.2	2.9	8.9	15.9	3.6	12.2
1961	56.4	39.3	23.1	17.1	16.2	4.7	2.8	8.7	17.1	3.9	13.3
1962	60.2	42.3	25.2	19.4	17.2	5.1	2.8	9.2	17.9	3.9	14.0
1963	64.8	45.5	27.9	21.7	17.6	5.0	2.9	9.7	19.4	4.0	15.4
New series											
1964	72.6	52.4	30.5	24.1	21.8	6.8	3.6	11.5	20.2	3.7	16.5
1965	78.5	56.6	30.2	23.8	26.3	8.1	5.1	13.1	21.9	3.9	18.0
1966	81.8	58.0	28.6	21.8	29.4	8.1	6.6	14.7	23.8	3.8	20.0
1967	83.5	58.1	28.7	21.5	29.4	8.0	6.0	15.4	25.4	3.3	22.1
1968	93.2	65.7	34.2	26.7	31.6	9.0	6.0	16.6	27.4	3.2	24.2
1969	100.5	72.7	37.2	29.2	35.5	10.7	6.8	17.9	27.8	3.2	24.6
1970	101.3	73.4	35.9	27.1	37.5	11.1	6.5	19.9	27.9	3.1	24.8
1971	117.9	88.2	48.5	38.7	39.7	13.0	5.4	21.3	29.7	3.8	25.9
1972	133.9	103.9	60.7	50.1	43.2	15.4	4.7	23.1	30.0	4.2	25.8
1973	147.4	115.0	65.1	54.6	49.9	17.7	6.2	26.0	32.3	4.7	27.6
1974	148.4	110.3	56.6	44.1	53.7	17.6	7.9	28.2	38.1	5.1	33.0
1975	143.6	102.9	51.9	36.6	51.0	13.9	8.0	29.1	40.7	6.1	34.6
1976	161.3	122.4	68.6	51.1	53.8	13.7	7.2	33.0	38.9	6.8	32.1
1977	187.0	149.1	92.5	72.7	56.6	15.7	7.7	33.2	37.9	7.1	30.9
1978	224.7	179.0	110.4	86.2	68.6	19.7	11.0	37.9	45.6	8.1	37.5
1979	250.3	201.5	117.2	90.1	84.3	27.1	15.0	42.3	48.8	8.6	40.2
1980	249.0	194.0	101.1	70.4	92.9	32.9	13.8	46.2	55.0	9.6	45.4
1981	257.8	204.4	100.0	70.2	104.4	38.0	17.0	49.4	53.3	10.4	42.9
1982	244.4	193.6	85.4	57.7	108.2	41.4	17.3	49.5	50.8	10.0	40.8
1983	279.2	228.5	126.6	95.7	102.0	41.0	12.9	48.1	50.7	10.6	40.2
1984	327.2	272.0	155.1	115.1	116.8	54.9	13.7	48.2	55.2	11.2	44.0
1985	355.6	292.8	158.8	116.0	134.0	66.9	15.8	51.3	62.8	12.4	50.4

See next page for continuation of table.

TABLE B–49.—*New construction activity, 1929–86*—Continued

[Value put in place, billions of dollars; monthly data at seasonally adjusted annual rates]

Year or month	Total new construction	Private construction							Public construction		
		Total	Residential buildings[1]		Nonresidential buildings and other construction[1]				Total	Federal	State and local[5]
			Total[2]	New housing units	Total	Commercial[3]	Industrial	Other[4]			
1985: Jan	343.6	285.3	159.4	114.3	125.8	63.2	15.7	47.0	58.3	11.8	46.6
Feb	344.8	287.7	158.0	114.7	129.7	64.8	15.4	49.5	57.2	11.0	46.2
Mar	352.7	291.9	161.0	116.0	130.9	66.1	15.4	49.4	60.8	12.3	48.5
Apr	350.1	289.3	154.7	115.6	134.6	66.9	16.0	51.7	60.8	11.3	49.5
May	352.0	287.6	151.6	115.2	136.0	67.3	16.2	52.5	64.4	12.9	51.5
June	352.9	288.4	154.3	115.4	134.1	65.7	15.0	53.4	64.5	13.1	51.4
July	355.1	290.3	156.8	115.3	133.5	64.9	15.8	52.8	64.8	13.5	51.3
Aug	353.3	289.8	154.9	115.5	134.9	66.8	15.3	52.8	63.5	12.4	51.1
Sept	361.3	296.0	161.0	116.1	135.0	68.5	15.8	50.7	65.3	14.1	51.3
Oct	374.0	312.0	174.8	117.2	137.1	68.2	15.9	53.0	62.1	11.0	51.0
Nov	357.6	294.4	158.2	117.5	136.2	68.9	16.1	51.2	63.2	12.4	50.8
Dec	365.6	300.6	161.8	118.7	138.8	71.7	16.5	50.6	64.9	12.6	52.3
1986: Jan	373.4	305.4	163.4	122.8	142.0	72.6	15.8	53.5	68.0	12.9	55.1
Feb	373.9	305.7	164.7	124.7	141.0	71.1	16.4	53.5	68.3	12.8	55.5
Mar	368.0	298.9	165.6	126.5	133.2	68.1	13.4	51.8	69.2	11.9	57.2
Apr	373.9	303.3	170.5	129.4	132.8	67.3	14.6	51.0	70.6	12.7	57.9
May	374.5	302.6	172.5	132.4	130.1	65.1	13.7	51.3	71.9	12.6	59.3
June	375.4	304.6	174.5	135.2	130.1	65.3	13.0	51.8	70.8	12.4	58.4
July	380.7	309.0	178.8	136.6	130.2	66.4	12.9	50.9	71.7	11.9	59.8
Aug	382.6	310.2	178.8	137.8	131.4	68.5	12.5	50.3	72.4	12.0	60.4
Sept	382.6	308.6	178.5	138.5	130.1	66.1	13.2	50.9	74.0	14.3	59.7
Oct	379.7	307.7	178.6	139.5	129.1	64.8	12.9	51.4	71.9	11.7	60.3
Nov[p]	377.0	306.2	178.0	139.5	128.2	64.4	12.7	51.2	70.7	11.6	59.1

[1] Beginning 1960, farm residential buildings included in residential buildings; prior to 1960, included in nonresidential buildings and other construction.

[2] Includes residential improvements, not shown separately. Prior to 1964, also includes nonhousekeeping units (hotels, motels, etc.)

[3] Office buildings, warehouses, stores, restaurants, garages, etc., and, beginning 1964, hotels and motels; prior to 1964 hotels and motels are included in total residential.

[4] Religious, educational, hospital and institutional, miscellaneous nonresidential, farm (see also footnote 1), public utilities, and all other private.

[5] Includes Federal grants-in-aid for State and local projects.

Source: Department of Commerce, Bureau of the Census.

TABLE B-50.—*New housing units started and authorized, 1959–86*

[Thousands of units]

Year or month	New housing units started						New private housing units authorized[2]			
	Private and public[1]		Private (farm and nonfarm)[1]				Total	Type of structure		
	Total (farm and nonfarm)	Nonfarm	Total	Type of structure				1 unit	2 to 4 units	5 units or more
				1 unit	2 to 4 units	5 units or more				
1959	1,553.7	1,531.3	1,517.0	1,234.0	283.0		1,208.3	938.3	77.1	192.9
1960	1,296.1	1,274.0	1,252.2	994.7	257.4		998.0	746.1	64.6	187.4
1961	1,365.0	1,336.8	1,313.0	974.3	338.7		1,064.2	722.8	67.6	273.8
1962	1,492.5	1,468.7	1,462.9	991.4	471.5		1,186.6	716.2	87.1	383.3
1963	1,634.9	1,614.8	1,603.2	1,012.4	590.8		1,334.7	750.2	118.9	465.6
1964	1,561.0	1,534.0	1,528.8	970.5	108.4	450.0	1,285.8	720.1	100.8	464.9
1965	1,509.7	1,487.5	1,472.8	963.7	86.6	422.5	1,239.8	709.9	84.8	445.1
1966	1,195.8	1,172.8	1,164.9	778.6	61.1	325.1	971.9	563.2	61.0	347.7
1967	1,321.9	1,298.8	1,291.6	843.9	71.6	376.1	1,141.0	650.6	73.0	417.5
1968	1,545.4	1,521.4	1,507.6	899.4	80.9	527.3	1,353.4	694.7	84.3	574.4
1969	1,499.5	1,482.3	1,466.8	810.6	85.0	571.2	1,323.7	625.9	85.2	612.7
1970	1,469.0	(3)	1,433.6	812.9	84.8	535.9	1,351.5	646.8	88.1	616.7
1971	2,084.5	(3)	2,052.2	1,151.0	120.3	780.9	1,924.6	906.1	132.9	885.7
1972	2,378.5	(3)	2,356.6	1,309.2	141.3	906.2	2,218.9	1,033.1	148.6	1,037.2
1973	2,057.5	(3)	2,045.3	1,132.0	118.3	795.0	1,819.5	882.1	117.0	820.5
1974	1,352.5	(3)	1,337.7	888.1	68.1	381.6	1,074.4	643.8	64.3	366.2
1975	1,171.4	(3)	1,160.4	892.2	64.0	204.3	939.2	675.5	63.9	199.8
1976	1,547.6	(3)	1,537.5	1,162.4	85.9	289.2	1,296.2	893.6	93.1	309.5
1977	[1]2,001.7	(3)	1,987.1	1,450.9	121.7	414.4	1,690.0	1,126.1	121.3	442.7
1978	2,036.1	(3)	2,020.3	1,433.3	125.0	462.0	1,800.5	1,182.6	130.6	487.3
1979	1,760.0	(3)	1,745.1	1,194.1	122.0	429.0	1,551.8	981.5	125.4	444.8
1980	1,312.6	(3)	1,292.2	852.2	109.5	330.5	1,190.6	710.4	114.5	365.7
1981	1,100.3	(3)	1,084.2	705.4	91.1	287.7	985.5	564.3	101.8	319.4
1982	1,072.1	(3)	1,062.2	662.6	80.0	319.6	1,000.5	546.4	88.3	365.8
1983	1,712.5	(3)	1,703.0	1,067.6	113.5	522.0	1,605.2	901.5	133.6	570.1
1984	1,755.8	(3)	1,749.5	1,084.2	121.4	544.0	1,681.8	922.4	142.6	616.8
1985	1,745.0	(3)	1,741.8	1,072.4	93.4	576.1	1,733.3	956.6	120.1	656.6
1986 p	1,808.3	(3)	1,806.6	1,179.4	83.7	543.6	1,759.3	1,073.6	110.2	575.5
			Seasonally adjusted annual rates							
1985: Jan	105.4	(3)	1,804	1,039	105	660	1,640	903	131	606
Feb	95.8	(3)	1,632	1,111	96	425	1,696	976	108	612
Mar	145.2	(3)	1,849	1,147	103	599	1,754	995	139	620
Apr	176.0	(3)	1,851	1,129	106	616	1,694	940	118	636
May	170.5	(3)	1,684	1,041	105	538	1,727	926	127	674
June	163.4	(3)	1,693	1,036	95	562	1,717	958	124	635
July	161.0	(3)	1,673	1,068	86	519	1,709	961	115	633
Aug	161.1	(3)	1,737	1,071	97	569	1,782	990	123	669
Sept	148.6	(3)	1,653	1,006	85	562	1,846	956	128	762
Oct	173.2	(3)	1,784	1,118	80	586	1,703	984	109	610
Nov	124.1	(3)	1,654	1,006	76	572	1,668	932	107	629
Dec	120.5	(3)	1,882	1,098	83	701	1,839	963	114	762
1986: Jan	115.9	(3)	2,034	1,335	107	592	1,861	1,060	127	674
Feb	107.2	(3)	2,001	1,202	115	684	1,808	1,033	122	653
Mar	151.1	(3)	1,960	1,221	84	655	1,834	1,043	107	684
Apr	188.3	(3)	2,019	1,242	79	698	1,885	1,139	117	629
May	186.8	(3)	1,853	1,241	83	529	1,788	1,092	118	578
June	183.6	(3)	1,852	1,230	80	542	1,792	1,121	108	563
July	172.2	(3)	1,782	1,137	81	564	1,759	1,093	103	563
Aug	163.8	(3)	1,795	1,186	89	520	1,673	1,039	108	526
Sept	154.3	(3)	1,664	1,102	59	503	1,603	1,047	97	459
Oct	154.9	(3)	1,628	1,085	82	461	1,565	1,006	103	456
Nov	115.9	(3)	1,585	1,087	67	431	1,613	991	92	530
Dec p	114.1	(3)	1,802	1,209	100	493	1,893	1,144	115	634

[1] Units in structures built by private developers for sale upon completion to local public housing authorities under the Department of Housing and Urban Development "Turnkey" program are classified as private housing. Military housing starts, including those financed with mortgages insured by FHA under Section 803 of the National Housing Act, are included in publicly owned starts and excluded from total private starts.

[2] Authorized by issuance of local building permit: in 17,000 permit-issuing places beginning 1984; in 16,000 places for 1978–83; in 14,000 places for 1972–77; in 13,000 places for 1967–71; in 12,000 places for 1963–66; and in 10,000 places prior to 1963.

[3] Not available separately beginning January 1970.

Source: Department of Commerce, Bureau of the Census.

TABLE B–51.—*Business expenditures for new plant and equipment, 1947–87*

[Billions of dollars; quarterly data at seasonally adjusted annual rates]

Year or quarter	Industries surveyed quarterly									Addenda				
	All industries	Manufacturing			Nonmanufacturing					Total nonfarm business [2]	Manufacturing	Nonmanufacturing		
		Total	Durable goods	Nondurable goods	Total [1]	Mining	Transportation	Public utilities	Commercial and other			Total	Surveyed quarterly	Surveyed annually [3]
1947	20.11	8.73	3.39	5.34	11.38	0.69	2.69	1.64	6.38	22.27	8.73	13.54	11.38	2.16
1948	22.78	9.25	3.54	5.71	13.53	.93	3.17	2.67	6.77	25.97	9.25	16.73	13.53	3.19
1949	20.28	7.32	2.67	4.64	12.96	.88	2.80	3.28	6.01	24.03	7.32	16.72	12.96	3.76
1950	21.56	7.73	3.22	4.51	13.83	.84	2.87	3.42	6.70	25.81	7.73	18.08	13.83	4.25
1951	26.81	11.07	5.12	5.95	15.74	1.11	3.60	3.75	7.29	31.38	11.07	20.31	15.74	4.57
1952	28.16	12.12	5.75	6.37	16.04	1.21	3.56	3.96	7.31	32.16	12.12	20.04	16.04	4.00
1953	29.96	12.43	5.71	6.72	17.53	1.25	3.58	4.61	8.09	34.20	12.43	21.77	17.53	4.23
1954	28.86	12.00	5.49	6.51	16.85	1.29	2.91	4.23	8.42	33.62	12.00	21.62	16.85	4.76
1955	30.94	12.50	5.87	6.62	18.44	1.31	3.10	4.26	9.77	37.08	12.50	24.58	18.44	6.14
1956	37.90	16.33	8.19	8.15	21.57	1.64	3.56	4.78	11.59	45.25	16.33	28.91	21.57	7.35
1957	40.54	17.50	8.59	8.91	23.04	1.69	3.84	5.95	11.56	48.62	17.50	31.11	23.04	8.08
1958	33.84	12.98	6.21	6.77	20.86	1.43	2.72	5.74	10.97	42.55	12.98	29.57	20.86	8.72
1959	35.88	13.76	6.72	7.04	22.12	1.35	3.47	5.46	11.84	45.17	13.76	31.41	22.12	9.29
1960	39.44	16.36	8.28	8.08	23.08	1.29	3.54	5.40	12.86	48.99	16.36	32.63	23.08	9.55
1961	38.34	15.53	7.43	8.10	22.80	1.26	3.14	5.20	13.21	48.14	15.53	32.60	22.80	9.80
1962	40.86	16.03	7.81	8.22	24.83	1.41	3.59	5.12	14.71	51.61	16.03	35.58	24.83	10.75
1963	43.67	17.27	8.64	8.63	26.40	1.26	3.64	5.33	16.17	53.59	17.27	36.33	26.40	9.93
1964	51.26	21.23	10.98	10.25	30.04	1.33	4.71	5.80	18.20	62.02	21.23	40.80	30.04	10.76
1965	59.52	25.41	13.49	11.92	34.12	1.36	5.66	6.49	20.60	70.79	25.41	45.39	34.12	11.27
1966	70.40	31.37	17.23	14.15	39.03	1.42	6.68	7.82	23.11	82.62	31.37	51.25	39.03	12.22
1967	72.75	32.25	17.83	14.42	40.50	1.38	6.57	9.33	23.22	83.82	32.25	51.57	40.50	11.07
1968	76.42	32.34	17.93	14.40	44.08	1.44	6.91	10.52	25.22	88.92	32.34	56.58	44.08	12.50
1969	85.74	36.27	19.97	16.31	49.47	1.77	7.23	11.70	28.77	100.02	36.27	63.74	49.47	14.27
1970	91.91	36.99	19.80	17.19	54.92	2.02	7.17	13.03	32.71	106.15	36.99	69.16	54.92	14.24
1971	92.91	33.60	16.78	16.82	59.31	2.67	6.42	14.70	35.52	109.18	33.60	75.58	59.31	16.26
1972	103.40	35.42	18.22	17.20	67.98	2.88	7.14	16.26	41.69	120.91	35.42	85.49	67.98	17.51
1973	120.03	42.35	22.63	19.72	77.67	3.30	8.00	17.99	48.39	139.26	42.35	96.91	77.67	19.24
1974	139.67	52.48	26.77	25.71	87.19	4.58	9.16	19.96	53.49	159.83	52.48	107.35	87.19	20.16
1975	142.42	53.66	25.37	28.28	88.76	6.12	9.95	20.23	52.47	162.60	53.66	108.95	88.76	20.19
1976	158.44	58.53	27.50	31.03	99.91	7.63	11.10	22.90	58.29	179.91	58.53	121.38	99.91	21.47
1977	184.82	67.48	32.77	34.71	117.34	9.81	12.20	27.83	67.51	208.15	67.48	140.67	117.34	23.33
1978	217.76	78.58	39.46	39.13	139.18	11.22	13.36	31.50	83.09	245.34	78.58	166.76	139.18	27.58
1979	254.96	95.92	48.50	47.42	159.04	12.81	16.05	35.63	94.56	284.94	95.92	189.02	159.04	29.98
1980	282.80	112.33	55.36	56.96	170.47	15.99	16.60	37.74	100.14	314.47	112.33	202.15	170.47	31.68
1981	315.22	126.54	59.81	66.73	188.68	21.39	15.84	41.21	110.24	349.26	126.54	222.72	188.68	34.04
1982	310.58	120.68	55.35	65.33	189.89	20.05	14.79	45.43	109.63	347.47	120.68	226.79	189.89	36.89
1983	304.78	116.20	53.08	63.12	188.58	15.19	13.97	44.96	114.45	343.35	116.20	227.15	188.58	38.56
1984	354.44	138.82	66.24	72.58	215.61	16.86	16.52	47.48	134.75	398.99	138.82	260.16	215.61	44.55
1985	387.13	153.48	73.27	80.21	233.65	15.88	18.02	48.81	150.94	431.94	153.48	278.46	233.65	44.81
1986 [4]	380.69	144.77	69.96	74.81	235.91	11.24	18.64	46.53	159.50	....	144.77	....	235.91	....
1987 [4]	384.24	141.95	69.50	72.44	242.30	10.11	18.86	44.42	168.91	....	141.95	....	242.30	....
1985: I	373.56	146.94	70.29	76.64	226.62	15.81	16.70	48.44	145.68	....	146.94	....	226.62	....
II	387.86	154.25	74.34	79.91	233.61	16.56	17.45	48.61	150.99	....	154.25	....	233.61	....
III	389.23	154.47	72.99	81.48	234.76	15.89	18.81	48.44	151.62	....	154.47	....	234.76	....
IV	397.88	158.26	75.47	82.79	239.61	15.25	19.15	49.79	155.42	....	158.26	....	239.61	....
1986: I	377.94	144.03	68.01	76.02	233.90	12.99	18.22	47.03	155.67	....	144.03	....	233.90	....
II	375.92	141.68	68.33	73.35	234.24	11.23	18.28	46.55	158.18	....	141.68	....	234.24	....
III	374.55	139.21	69.31	69.89	235.34	10.15	19.03	45.90	160.25	....	139.21	....	235.34	....
IV [4]	394.34	154.17	74.17	80.00	240.17	10.62	19.02	46.63	163.91	....	154.17	....	240.17	....
1987: I [4]	386.82	141.22	67.86	73.36	245.60	10.36	19.85	46.32	169.08	....	141.22	....	245.60	....
II [4]	393.39	145.23	72.37	72.85	248.16	10.58	18.46	46.90	172.22	....	145.23	....	248.16	....

[1] Excludes forestry, fisheries, and agricultural services; medical services; professional services; social services and membership organizations; and real estate, which, effective with the April–May 1984 survey, are no longer surveyed quarterly. See last column ("nonmanufacturing surveyed annually") for data for these industries.

[2] "All industries" plus the part of nonmanufacturing that is surveyed annually.

[3] Consists of forestry, fisheries, and agricultural services; medical services; professional services; social services and membership organizations; and real estate.

[4] Planned capital expenditures as reported by business in late October and November 1986, corrected for biases.

Source: Department of Commerce, Bureau of Economic Analysis.

TABLE B-52.—*Manufacturing and trade, sales and inventories, 1948–86*

[Amounts in millions of dollars; monthly data seasonally adjusted]

Year or month	Total manufacturing and trade			Manufacturing			Merchant wholesalers			Retail trade		
	Sales [1]	Inventories [2]	Ratio [3]	Sales [1]	Inventories [2]	Ratio [3]	Sales [1]	Inventories [2]	Ratio [3]	Sales [1]	Inventories [2]	Ratio [3]
1948	35,260	52,507	1.42	17,316	28,543	1.57	6,808	7,957	1.13	11,135	16,007	1.39
1949	33,788	49,497	1.53	16,126	26,321	1.75	6,514	7,706	1.19	11,149	15,470	1.41
1950	38,596	59,822	1.36	18,634	31,078	1.48	7,695	9,284	1.07	12,268	19,460	1.38
1951	43,356	70,242	1.55	21,714	39,306	1.66	8,597	9,886	1.16	13,046	21,050	1.64
1952	44,840	72,377	1.58	22,529	41,136	1.78	8,782	10,210	1.12	13,529	21,031	1.52
1953	47,987	76,122	1.58	24,843	43,948	1.76	9,052	10,686	1.17	14,091	21,488	1.53
1954	46,443	73,175	1.60	23,355	41,612	1.81	8,993	10,637	1.18	14,095	20,926	1.51
1955	51,694	79,516	1.47	26,480	45,069	1.62	9,893	11,678	1.13	15,321	22,769	1.43
1956	54,063	87,304	1.55	27,740	50,642	1.73	10,513	13,260	1.19	15,811	23,402	1.47
1957	55,879	89,052	1.59	28,736	51,871	1.80	10,475	12,730	1.23	16,667	24,451	1.44
1958	54,201	87,093	1.60	27,247	50,241	1.84	10,257	12,739	1.24	16,696	24,113	1.43
1959	59,729	92.129	1.50	30,286	52,945	1.70	11,491	13,879	1.15	17,951	25,305	1.40
1960	60,827	94,713	1.56	30,879	53,780	1.75	11,656	14,120	1.22	18,294	26,813	1.45
1961	61,159	95,594	1.54	30,923	54,885	1.74	11,988	14,488	1.20	18,249	26,221	1.43
1962	65,662	101,063	1.50	33,357	58,186	1.70	12,674	14,936	1.16	19,630	27,941	1.38
1963	68,995	105,480	1.49	35,058	60,046	1.69	13,382	16,048	1.15	20,556	29,386	1.39
1964	73,682	111,503	1.47	37,331	63,409	1.64	14,529	17,000	1.14	21,823	31,094	1.40
1965	80,283	120,907	1.45	40,995	68,185	1.60	15,611	18,317	1.15	23,677	34,405	1.39
1966	87,187	136,790	1.47	44,870	77,952	1.62	16,987	20,765	1.15	25,330	38,073	1.44
1967	90,419	144,920	1.56	46,487	84,666	1.76	19,520	24,955	1.24	24,413	35,299	1.43
1968	98,184	155,831	1.53	50,228	90,618	1.74	20,926	26,268	1.23	27,030	38,945	1.38
1969	105,088	169,482	1.55	53,501	98,203	1.77	22,694	28,762	1.21	28,893	42,517	1.41
1970	107,536	177,719	1.62	52,805	101,653	1.90	24,031	32,199	1.26	30,700	43,867	1.41
1971	116,110	187,929	1.58	55,906	102,656	1.83	26,350	35,210	1.27	33,853	50,063	1.41
1972	130,144	202,132	1.49	63,027	108,237	1.67	29,695	38,816	1.24	37,422	55,079	1.40
1973	153,566	233,419	1.41	72,931	124,626	1.58	38,173	45,556	1.11	42,462	63,237	1.40
1974	177,861	286,098	1.45	84,790	157,792	1.65	47,989	57,239	1.07	45,082	71,067	1.48
1975	182,404	288,651	1.57	86,589	159,935	1.84	46,803	56,972	1.21	49,012	71,744	1.44
1976	204,463	318,833	1.48	98,797	175,195	1.69	50,885	64,365	1.19	54,781	79,273	1.38
1977	230,000	351,459	1.46	113,202	189,214	1.61	56,364	72,801	1.21	60,434	89,444	1.39
1978	260,805	399,608	1.44	126,905	210,509	1.57	66,669	86,405	1.20	67,231	102,694	1.43
1979	298,334	451,460	1.43	143,936	241,100	1.57	79,472	99,262	1.18	74,926	111,098	1.44
1980	328,058	494,105	1.45	154,391	264,281	1.66	93,704	113,478	1.14	79,963	116,346	1.42
1981	356,919	528,105	1.44	168,129	282,645	1.64	102,013	118,259	1.13	86,777	127,201	1.41
1982	344,656	509,555	1.51	159,027	264,909	1.73	96,290	118,149	1.24	89,339	126,497	1.41
1983	368,724	520,328	1.38	170,441	260,682	1.52	100,424	120,265	1.17	97,858	139,381	1.34
1984	410,737	575,098	1.34	189,578	285,709	1.45	113,404	131,544	1.12	107,755	157,845	1.39
1985	424,091	583,148	1.37	195,102	281,884	1.46	114,494	135,940	1.17	114,495	165,324	1.40
1985: Jan	415,973	576,490	1.39	191,724	285,785	1.49	113,738	131,752	1.16	110,511	158,953	1.44
Feb	418,218	578,541	1.38	192,261	286,146	1.49	114,022	132,917	1.17	111,935	159,478	1.42
Mar	420,346	578,370	1.38	194,303	286,171	1.47	114,044	133,135	1.17	111,999	159,064	1.42
Apr	423,215	578,533	1.37	193,509	286,049	1.48	115,450	132,984	1.15	114,256	159,500	1.40
May	424,379	577,813	1.36	194,638	284,900	1.46	115,749	133,485	1.15	113,992	159,428	1.40
June	418,219	580,107	1.39	193,871	285,678	1.47	110,880	134,696	1.21	113,468	159,733	1.41
July	421,565	580,372	1.38	193,793	285,036	1.47	113,152	134,762	1.19	114,620	160,574	1.40
Aug	428,205	579,486	1.35	196,593	284,688	1.45	115,263	134,732	1.17	116,349	160,066	1.38
Sept	427,201	579,519	1.36	194,229	284,030	1.46	114,473	134,496	1.17	118,499	160,993	1.36
Oct	426,123	581,986	1.37	197,229	282,444	1.43	113,947	135,038	1.19	114,947	164,504	1.43
Nov	431,012	582,707	1.35	200,131	281,993	1.41	115,527	134,927	1.17	115,354	165,787	1.44
Dec	432,679	583,148	1.35	199,084	281,884	1.42	116,852	135,940	1.16	116,743	165,324	1.42
1986: Jan	431,713	584,968	1.35	198,716	280,357	1.41	115,648	136,624	1.18	117,349	167,987	1.43
Feb	426,854	585,176	1.37	196,274	279,236	1.42	113,380	136,561	1.20	117,200	169,379	1.45
Mar	420,230	588,178	1.40	191 051	279,571	1.46	112,495	137,056	1.22	116,684	171,551	1.47
Apr	428,455	588,599	1.37	196,132	279,358	1.42	114,608	137,083	1.20	117,715	172,158	1.46
May	421,613	586,727	1.39	193,068	278,352	1.44	109,870	137,506	1.25	118,675	170,869	1.44
June	425,475	588,908	1.38	193,642	278,410	1.44	112,873	138,793	1.23	118,960	171,705	1.44
July	427,473	591,895	1.38	193,294	278,613	1.44	114,375	139,753	1.22	119,804	173,529	1.45
Aug	429,310	590,141	1.37	193,305	277,473	1.44	114,482	139,742	1.22	121,523	172,926	1.42
Sept	442,206	588,069	1.33	196,281	276,574	1.41	117,594	139,878	1.19	128,331	171,617	1.34
Oct	435,848	591,556	1.36	196,202	276,007	1.41	117,991	139,211	1.18	121,655	176,338	1.45
Nov	437,141	590,606	1.35	198,232	276,588	1.40	117,972	138,837	1.18	120,937	175,181	1.45
Dec	......	......	......	......	......	......	......	......	......	126,255	......	......

[1] Monthly average for year and total for month.

[2] Seasonally adjusted, end of period.

[3] Inventory/sales ratio. For annual periods, ratio of weighted average inventories to average monthly sales; for monthly data, ratio of inventories at end of month to sales for month.

Note.—Earlier data are not strictly comparable with data beginning 1958 for manufacturing and beginning 1967 for wholesale and retail trade.

The inventory figures in this table do not agree with the estimates of change in business inventories included in the gross national product since these figures cover only manufacturing and trade rather than all business, and show inventories in terms of current book value without adjustment for revaluation.

Source: Department of Commerce, Bureau of the Census.

TABLE B–53.—*Manufacturers' shipments and inventories, 1947–86*

[Millions of dollars; monthly data seasonally adjusted]

Year or month	Shipments[1]			Inventories[2]								
					Durable goods industries				Nondurable goods industries			
	Total	Durable goods industries	Nondurable goods industries	Total	Total	Materials and supplies	Work in process	Finished goods	Total	Materials and supplies	Work in process	Finished goods
1947	15,513	6,694	8,819	25,897	13,061	......	......	......	12,836	......	......	......
1948	17,316	7,579	9,738	28,543	14,662	......	......	......	13,881	......	......	......
1949	16,126	7,191	8,935	26,321	13,060	......	......	......	13,261	......	......	......
1950	18,634	8,845	9,789	31,078	15,539	......	......	......	15,539	......	......	......
1951	21,714	10,493	11,221	39,306	20,991	......	......	......	18,315	......	......	......
1952	22,529	11,313	11,216	41,136	23,731	......	......	......	17,405	......	......	......
1953	24,843	13,349	11,494	43,948	25,878	8,966	10,720	6,206	18,070	8,317	2,472	7,409
1954	23,355	11,828	11,527	41,612	23,710	7,894	9,721	6,040	17,902	8,167	2,440	7,415
1955	26,480	14,071	12,409	45,069	26,405	9,194	10,756	6,348	18,664	8,556	2,571	7,666
1956	27,740	14,715	13,025	50,642	30,447	10,417	12,317	7,565	20,195	8,971	2,721	8,622
1957	28,736	15,237	13,499	51,871	31,728	10,608	12,837	8,125	20,143	8,775	2,864	8,624
1958	27,247	13,563	13,684	50,241	30,258	10,032	12,387	7,839	19,983	8,662	2,828	8,491
1959	30,286	15,609	14,677	52,945	32,077	10,776	13,063	8,239	20,868	9,080	2,944	8,845
1960	30,879	15,883	14,996	53,780	32,371	10,353	12,772	9,245	21,409	9,082	2,946	9,380
1961	30,923	15,616	15,307	54,885	32,544	10,279	13,203	9,063	22,341	9,493	3,110	9,738
1962	33,357	17,262	16,095	58,186	34,632	10,810	14,159	9,662	23,554	9,813	3,296	10,444
1963	35,058	18,280	16,778	60,046	35,866	11,068	14,871	9,925	24,180	9,978	3,406	10,796
1964	37,331	19,637	17,694	63,409	38,506	11,970	16,191	10,344	24,903	10,131	3,511	11,261
1965	40,995	22,221	18,774	68,185	42,257	13,325	18,075	10,854	25,928	10,448	3,806	11,674
1966	44,870	24,649	20,220	77,952	49,920	15,489	21,939	12,491	28,032	11,155	4,204	12,673
1967	46,487	25,267	21,220	84,666	55,005	16,455	25,005	13,547	29,659	11,715	4,421	13,523
1968	50,228	27,659	22,570	90,618	58,875	17,376	27,336	14,163	31,743	12,289	4,848	14,606
1969	53,501	29,437	24,064	98,203	64,739	18,693	30,408	15,639	33,463	12,724	5,122	15,617
1970	52,805	28,188	24,617	101,653	66,780	19,182	29,848	17,751	34,871	13,150	5,274	16,448
1971	55,906	29,954	25,952	102,656	66,289	19,759	28,650	17,880	36,368	13,683	5,665	17,019
1972	63,027	34,027	29,000	108,237	70,250	20,860	30,788	18,601	37,988	14,676	5,982	17,330
1973	72,931	39,681	33,250	124,626	81,398	26,028	35,545	19,823	43,230	18,132	6,707	18,391
1974	84,790	44,230	40,560	157,792	101,739	35,151	42,603	23,985	56,053	23,699	8,175	24,179
1975	86,589	43,659	42,931	159,935	102,874	33,920	43,369	25,586	57,060	23,542	8,837	24,681
1976	98,797	50,700	48,097	175,195	112,581	37,548	46,345	28,690	62,612	25,833	9,933	26,846
1977	113,202	59,267	53,935	189,214	121,601	40,251	50,620	30,730	67,613	27,398	11,003	29,212
1978	126,905	67,848	59,057	210,509	137,891	45,252	58,634	34,005	72,618	29,317	11,907	31,394
1979	143,936	76,060	67,876	241,100	160,533	52,687	69,254	38,592	80,567	32,451	13,741	34,375
1980	154,391	77,550	76,841	264,281	174,620	55,121	76,997	42,502	89,661	36,206	15,732	37,723
1981	168,129	83,872	84,257	282,645	186,347	57,927	81,105	47,315	96,298	37,758	16,074	42,466
1982	159,027	76,693	82,334	264,909	175,103	52,454	77,813	44,836	89,806	35,165	14,308	40,333
1983	170,441	84,951	85,491	260,682	171,629	51,604	77,463	42,562	89,053	36,170	14,480	38,403
1984	189,578	98,502	91,076	285,709	191,109	56,469	88,105	46,535	94,600	36,635	14,811	43,154
1985	195,102	103,649	91,452	281,884	189,164	53,527	89,912	45,725	92,720	35,503	14,568	42,649
1985: Jan	191,724	101,966	89,758	285,785	192,153	56,033	88,672	47,448	93,632	36,731	14,656	42,245
Feb	192,261	101,724	90,537	286,146	192,030	55,768	88,967	47,295	94,116	36,914	14,642	42,560
Mar	194,303	102,116	92,187	286,171	192,355	55,445	89,684	47,226	93,816	36,400	14,524	42,892
Apr	193,509	102,068	91,441	286,049	192,475	55,638	89,537	47,300	93,574	36,399	14,351	42,824
May	194,638	102,718	91,920	284,900	191,546	54,693	89,654	47,199	93,354	36,107	14,318	42,929
June	193,871	102,657	91,214	285,678	192,239	54,714	90,306	47,219	93,439	36,448	14,336	42,655
July	193,793	102,478	91,315	285,036	192,163	54,257	91,383	46,523	92,873	35,917	14,216	42,740
Aug	196,593	105,311	91,282	284,688	192,037	54,217	91,473	46,347	92,651	35,974	14,161	42,516
Sept	194,229	103,656	90,573	284,030	191,930	53,844	92,181	45,905	92,100	35,433	14,310	42,357
Oct	197,229	106,479	90,750	282,444	190,508	53,644	91,072	45,792	91,936	35,539	14,607	41,790
Nov	200,131	107,007	93,124	281,993	190,284	52,999	91,020	46,265	91,709	35,051	14,580	41,978
Dec	199,084	105,777	93,307	281,884	189,164	53,527	89,912	45,725	92,720	35,503	14,568	42,649
1986: Jan	198,716	105,631	93,085	280,357	188,518	52,317	90,477	45,724	91,839	35,500	14,150	42,189
Feb	196,274	105,545	90,729	279,236	187,644	51,921	90,125	45,598	91,592	35,462	14,198	41,932
Mar	191,051	102,693	88,358	279,571	188,333	51,688	91,236	45,409	91,238	35,110	13,921	42,207
Apr	196,132	106,592	89,540	279,358	188,031	51,864	90,825	45,342	91,327	35,078	13,790	42,459
May	193,068	103,672	89,396	278,352	187,637	51,387	90,714	45,536	90,715	34,889	13,697	42,129
June	193,642	104,553	89,089	278,410	187,148	51,559	90,918	44,671	91,262	35,289	13,938	42,035
July	193,294	104,980	88,314	278,613	186,858	51,338	90,518	45,002	91,755	35,685	13,788	42,282
Aug	193,305	104,154	89,151	277,473	186,045	50,878	90,673	44,494	91,428	35,684	13,504	42,240
Sept	196,281	106,027	90,254	276,574	186,102	51,052	90,898	44,152	90,472	35,367	13,737	41,368
Oct	196,202	107,443	88,759	276,007	185,358	50,561	90,507	44,290	90,649	35,580	13,905	41,164
Nov	198,232	107,185	91,047	276,588	185,742	50,530	90,030	45,182	90,846	35,457	13,954	41,435

[1] Monthly average for year and total for month.

[2] Book value, seasonally adjusted, end of period.

Note.—Data beginning 1958 are not strictly comparable with earlier data.

Source: Department of Commerce, Bureau of the Census.

Table B-54.—*Manufacturers' new and unfilled orders, 1947–86*

[Amounts in millions of dollars; monthly data seasonally adjusted]

Year or month	New orders[1]				Unfilled orders[2]			Unfilled orders—shipments ratio[3]		
	Total	Durable goods industries		Nondurable goods industries	Total	Durable goods industries	Nondurable goods industries	Total	Durable goods industries	Nondurable goods industries
		Total	Capital goods industries, nondefense							
1947	15,256	6,388	....	8,868	34,473	28,579	5,894	....	....	....
1948	17,693	8,126	....	9,566	30,736	26,619	4,117	....	....	....
1949	15,614	6,633	....	8,981	24,045	19,622	4,423	....	....	....
1950	20,110	10,165	....	9,945	41,456	35,435	6,021	....	....	....
1951	23,907	12,841	....	11,066	67,266	63,394	3,872	....	....	....
1952	23,204	12,061	....	11,143	75,857	72,680	3,177	....	....	....
1953	23,586	12,147	....	11,439	61,178	58,637	2,541	....	....	....
1954	22,335	10,768	....	11,566	48,266	45,250	3,016	3.42	4.12	0.96
1955	27,465	14,996	....	12,469	60,004	56,241	3,763	3.63	4.27	1.12
1956	28,368	15,365	....	13,003	67,375	63,880	3,495	3.87	4.55	1.04
1957	27,559	14,111	....	13,448	53,183	50,352	2,831	3.35	4.00	.85
1958	27,002	13,290	....	13,712	47,370	44,559	2,811	3.09	3.69	.86
1959	30,724	16,003	....	14,720	52,732	49,373	3,359	3.01	3.54	.94
1960	30,235	15,303	....	14,932	45,080	42,514	2,566	2.78	3.37	.72
1961	31,104	15,759	....	15,345	47,407	44,375	3,032	2.63	3.13	.79
1962	33,436	17,374	....	16,061	48,577	45,965	2,612	2.69	3.24	.68
1963	35,524	18,709	....	16,815	54,327	51,270	3,057	2.80	3.37	.73
1964	38,357	20,652	....	17,705	66,882	63,691	3,191	3.10	3.72	.72
1965	42,100	23,278	....	18,823	80,071	76,298	3,773	3.33	3.95	.80
1966	46,402	26,177	....	20,225	98,401	94,575	3,826	3.81	4.55	.76
1967	47,056	25,825	....	21,231	104,547	100,576	3,971	3.70	4.40	.73
1968	50,687	28,116	6,903	22,571	109,926	105,950	3,976	3.85	4.65	.69
1969	53,950	29,871	7,660	24,079	115,422	111,250	4,172	3.75	4.50	.69
1970	52,038	27,388	6,738	24,650	106,158	101,566	4,592	3.65	4.39	.77
1971	55,983	29,998	7,444	25,986	107,147	102,119	5,027	3.38	4.06	.77
1972	64,167	35,064	8,622	29,104	121,061	114,725	6,336	3.31	3.90	.88
1973	76,056	42,726	10,971	33,330	158,884	151,504	7,380	3.86	4.56	.93
1974	87,244	46,835	12,673	40,409	188,467	182,925	5,542	4.13	4.96	.64
1975	85,220	42,099	11,011	43,122	172,037	164,139	7,898	3.76	4.52	.84
1976	99,532	51,403	12,791	48,129	180,562	172,273	8,288	3.30	3.94	.76
1977	115,032	61,082	15,291	53,950	203,475	195,008	8,467	3.27	3.89	.70
1978	131,546	72,339	19,458	59,207	259,770	249,483	10,287	3.59	4.22	.78
1979	147,403	79,451	23,231	67,953	302,145	290,921	11,224	3.88	4.61	.76
1980	156,161	79,360	23,259	76,801	323,393	312,648	10,745	3.81	4.55	.67
1981	167,752	83,553	24,050	84,199	319,094	309,066	10,028	3.77	4.57	.59
1982	157,255	74,996	20,681	82,260	296,918	287,796	9,122	3.76	4.65	.53
1983	173,259	87,631	22,764	85,627	330,924	320,123	10,801	3.38	4.10	.55
1984	191,634	100,611	27,017	91,024	355,640	345,443	10,197	3.36	4.06	.49
1985	195,803	104,305	27,215	91,499	363,809	353,036	10,773	3.33	4.04	.50
1985: Jan	195,210	105,447	23,633	89,763	359,125	348,924	10,201	3.47	4.23	.49
Feb	193,057	102,467	29,493	90,590	359,926	349,671	10,255	3.47	4.21	.50
Mar	191,532	99,544	27,206	91,988	357,151	347,096	10,055	3.40	4.14	.48
Apr	191,081	99,839	25,461	91,242	354,731	344,874	9,857	3.40	4.12	.48
May	195,019	102,971	25,594	92,048	355,112	345,127	9,985	3.38	4.12	.47
June	198,261	106,780	27,984	91,481	359,502	349,250	10,252	3.39	4.11	.49
July	195,793	104,370	26,685	91,423	361,502	351,142	10,360	3.41	4.14	.49
Aug	198,782	107,661	27,554	91,121	363,691	353,492	10,199	3.41	4.11	.49
Sept	197,332	106,641	29,240	90,691	366,794	356,477	10,317	3.47	4.22	.48
Oct	195,381	104,495	27,092	90,886	364,946	354,493	10,453	3.37	4.06	.50
Nov	196,865	103,796	25,788	93,069	361,680	351,282	10,398	3.32	4.00	.49
Dec	201,213	107,531	30,566	93,682	363,809	353,036	10,773	3.33	4.04	.50
1986: Jan	201,133	108,194	24,288	92,939	366,226	355,599	10,627	3.43	4.20	.48
Feb	198,559	107,545	28,637	91,014	368,511	357,599	10,912	3.43	4.17	.50
Mar	192,996	104,682	26,540	88,314	370,456	359,588	10,868	3.50	4.27	.50
Apr	193,151	103,747	26,179	89,404	367,475	356,743	10,732	3.39	4.14	.49
May	192,122	102,624	26,145	89,498	366,529	355,695	10,834	3.46	4.23	.50
June	191,795	102,730	26,421	89,065	364,682	353,872	10,810	3.36	4.13	.47
July	194,560	106,220	27,387	88,340	365,948	355,112	10,836	3.38	4.14	.48
Aug	192,836	103,845	26,325	88,991	365,479	354,803	10,676	3.41	4.19	.47
Sept	199,399	108,723	28,222	90,676	368,597	357,499	11,098	3.36	4.15	.48
Oct	192,502	103,569	26,912	88,933	364,897	353,625	11,272	3.31	4.05	.49
Nov	200,421	109,273	28,647	91,148	367,086	355,713	11,373	3.30	4.04	.49

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[1] Monthly average for year and total for month.

[2] Seasonally adjusted, end of period.

[3] Ratio of unfilled orders at end of period to shipments for period; excludes industries with no unfilled orders. Annual figures relate to seasonally adjusted data for December.

Note.—Data beginning 1958 are not strictly comparable with earlier data.

Source: Department of Commerce, Bureau of the Census.

Table B-55.—*Consumer price indexes, major expenditure classes, 1946–86*

[1967=100]

Year or month	All items	Food and beverages		Housing				Apparel and upkeep	Transportation	Medical care	Entertainment	Other goods and services	Energy[3]
		Total[1]	Food	Total[2]	Shelter	Fuel and other utilities[3]	Household furnishings and operation[2]						
1946	58.5	....	58.1	60.6	....	....	....	67.5	50.3	44.4	....	....	....
1947	66.9	....	70.6	65.2	....	....	....	78.2	55.5	48.1	....	....	....
1948	72.1	....	76.6	69.8	....	....	....	83.3	61.8	51.1	....	....	....
1949	71.4	....	73.5	70.9	....	....	....	80.1	66.4	52.7	....	....	....
1950	72.1	....	74.5	72.8	....	....	....	79.0	68.2	53.7	....	....	....
1951	77.8	....	82.8	77.2	....	....	....	86.1	72.5	56.3	....	....	....
1952	79.5	....	84.3	78.7	....	....	....	85.3	77.3	59.3	....	....	....
1953	80.1	....	83.0	80.8	76.5	83.0	91.3	84.6	79.5	61.4	....	....	....
1954	80.5	....	82.8	81.7	78.2	83.5	90.9	84.5	78.3	63.4	....	....	....
1955	80.2	....	81.6	82.3	79.1	85.1	89.9	84.1	77.4	64.8	....	....	....
1956	81.4	....	82.2	83.6	80.4	87.3	89.9	85.8	78.8	67.2	....	....	....
1957	84.3	....	84.9	86.2	83.4	89.9	91.9	87.3	83.3	69.9	....	....	90.1
1958	86.6	....	88.5	87.7	85.1	91.7	92.3	87.5	86.0	73.2	....	....	90.3
1959	87.3	....	87.1	88.6	86.0	93.8	93.1	88.2	89.6	76.4	....	....	91.8
1960	88.7	....	88.0	90.2	87.8	95.9	93.8	89.6	89.6	79.1	....	....	94.2
1961	89.6	....	89.1	90.9	88.5	97.1	93.7	90.4	90.6	81.4	....	....	94.4
1962	90.6	....	89.9	91.7	89.6	97.3	93.8	90.9	92.5	83.5	....	....	94.7
1963	91.7	....	91.2	92.7	90.7	98.2	94.6	91.9	93.0	85.6	....	....	95.0
1964	92.9	....	92.4	93.8	92.2	98.4	95.0	92.7	94.3	87.3	....	....	94.6
1965	94.5	....	94.4	94.9	93.8	98.3	95.3	93.7	95.9	89.5	....	....	96.3
1966	97.2	....	99.1	97.2	96.8	98.8	97.0	96.1	97.2	93.4	....	....	97.8
1967	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
1968	104.2	103.6	103.6	104.0	104.8	101.3	103.8	105.4	103.2	106.1	105.7	105.2	101.5
1969	109.8	108.8	108.9	110.4	113.3	103.6	107.7	111.5	107.2	113.4	111.0	110.4	104.2
1970	116.3	114.7	114.9	118.2	123.6	107.6	111.5	116.1	112.7	120.6	116.7	116.8	107.0
1971	121.3	118.3	118.4	123.4	128.8	115.0	115.7	119.8	118.6	128.4	122.9	122.4	111.2
1972	125.3	123.2	123.5	128.1	134.5	120.1	118.3	122.3	119.9	132.5	126.5	127.5	114.3
1973	133.1	139.5	141.4	133.7	140.7	126.9	121.6	126.8	123.8	137.7	130.0	132.5	123.5
1974	147.7	158.7	161.7	148.8	154.4	150.2	135.3	136.2	137.7	150.5	139.8	142.0	159.7
1975	161.2	172.1	175.4	164.5	169.7	167.8	151.0	142.3	150.6	168.6	152.2	153.9	176.6
1976	170.5	177.4	180.8	174.6	179.0	182.7	160.1	147.6	165.5	184.7	159.8	162.7	189.3
1977	181.5	188.0	192.2	186.5	191.1	202.2	167.5	154.2	177.2	202.4	167.7	172.2	207.3
1978	195.4	206.3	211.4	202.8	210.4	216.0	177.7	159.6	185.5	219.4	176.6	183.3	220.4
1979	217.4	228.5	234.5	227.6	239.7	239.3	190.3	166.6	212.0	239.7	188.5	196.7	275.9
1980	246.8	248.0	254.6	263.3	281.7	278.6	205.4	178.4	249.7	265.9	205.3	214.5	361.1
1981	272.4	267.3	274.6	293.5	314.7	319.2	221.3	186.9	280.0	294.5	221.4	235.7	410.0
1982	289.1	278.2	285.7	314.7	337.0	350.8	233.2	191.8	291.5	328.7	235.8	259.9	416.1
1983	298.4	284.4	291.7	323.1	344.8	370.3	238.5	196.5	298.4	357.3	246.0	288.3	419.3
1984	311.1	295.1	302.9	336.5	361.7	387.3	242.5	200.2	311.7	379.5	255.1	307.7	423.6
1985	322.2	302.0	309.8	349.9	382.0	393.6	247.2	206.0	319.9	403.1	265.0	326.6	426.5
1986	328.4	311.8	319.7	360.2	402.9	384.7	250.4	207.8	307.5	433.5	274.1	346.4	370.3
1985: Jan	316.1	299.3	307.3	342.0	371.2	387.2	244.2	199.8	314.7	391.1	261.0	319.1	414.5
Feb	317.4	301.4	309.5	343.6	373.3	386.5	246.2	201.8	314.3	393.8	261.3	320.5	411.4
Mar	318.8	301.6	309.7	344.7	374.3	388.2	246.9	205.3	316.7	396.5	262.2	321.1	416.6
Apr	320.1	301.6	309.6	345.9	375.9	388.7	247.9	205.9	320.0	398.0	263.3	321.8	424.4
May	321.3	301.0	308.9	348.5	379.5	393.0	247.6	205.3	321.4	399.5	263.6	322.3	431.7
June	322.3	301.4	309.3	350.4	381.0	399.4	247.1	204.6	321.8	401.7	264.8	323.0	436.8
July	322.8	301.6	309.5	351.6	383.2	399.9	246.5	202.8	321.8	404.0	265.7	325.0	437.1
Aug	323.5	301.8	309.7	352.9	385.9	398.9	247.0	205.3	320.7	406.6	265.7	326.0	433.8
Sept	324.5	302.1	309.9	353.8	386.9	400.5	247.1	209.6	319.7	408.3	266.8	333.3	432.6
Oct	325.5	302.5	309.8	354.4	389.1	395.6	248.4	211.1	320.9	410.5	268.4	334.9	427.1
Nov	326.6	303.6	311.0	355.0	391.3	392.1	248.9	211.2	323.2	413.0	269.0	335.3	425.1
Dec	327.4	305.6	313.2	355.8	392.3	393.3	248.8	209.0	324.0	414.7	268.3	336.5	426.5
1986: Jan	328.4	307.9	315.6	356.8	393.8	394.6	248.8	205.0	323.9	418.2	270.8	339.1	424.7
Feb	327.5	307.7	315.3	356.5	394.8	390.0	249.0	204.1	319.2	422.3	272.0	340.3	408.9
Mar	326.0	307.8	315.4	357.0	397.0	385.5	249.8	206.3	309.6	425.8	271.9	341.1	381.3
Apr	325.3	308.5	316.1	358.0	400.1	381.8	249.6	207.3	303.3	428.0	272.3	341.8	361.8
May	326.3	309.4	317.0	358.5	400.9	382.5	249.9	206.4	305.7	429.7	272.9	342.1	367.6
June	327.9	309.5	317.1	361.2	401.6	393.8	250.2	204.5	308.6	432.0	273.9	342.6	380.6
July	328.0	312.2	320.1	361.5	403.5	389.4	250.5	203.2	304.7	434.8	274.4	344.9	366.5
Aug	328.6	314.6	322.7	362.4	405.2	389.5	250.5	207.0	301.3	437.5	274.7	346.4	358.6
Sept	330.2	315.1	323.2	363.7	407.6	388.3	251.5	212.1	302.2	439.7	275.3	353.3	360.6
Oct	330.5	315.6	323.7	363.0	409.5	379.1	251.6	213.2	302.6	442.3	276.5	354.6	348.6
Nov	330.8	316.4	324.6	361.7	410.2	371.1	251.2	213.1	304.3	444.6	277.4	354.9	341.7
Dec	331.1	317.0	325.0	362.1	410.4	371.0	252.4	210.9	304.8	446.8	277.4	355.2	342.4

[1] Includes alcoholic beverages, not shown separately.

[2] Series beginning 1967 not comparable with series for earlier years.

[3] See Tables B–56 and B–57.

Note.—Data beginning 1978 are for all urban consumers; earlier data are for urban wage earners and clerical workers.

Data beginning 1983 incorporate a rental equivalence measure for homeowners' costs and therefore are not strictly comparable with earlier figures.

Source: Department of Labor, Bureau of Labor Statistics.

Table B-56.—*Consumer price indexes, selected expenditure classes, 1946–86*

[1967 = 100]

Year or month	Food and beverages				Shelter					Fuel and other utilities				
	Total [1]	Food			Total	Renters' costs		Homeowners' costs	Maintenance and repairs	Total	Household fuels			Other utilities and public services
		Total	At home	Away from home		Total	Rent, residential				Total	Fuel oil, coal, and bottled gas	Gas (piped) and electricity	
1946	...	58.1	...	...	...	...	59.2	...	...	...	...	51.3	77.4	...
1947	...	70.6	73.5	...	...	...	61.1	...	...	...	...	58.4	77.1	...
1948	...	76.6	79.8	...	...	...	65.1	...	...	...	...	68.6	79.1	...
1949	...	73.5	76.7	...	...	...	68.0	...	...	...	...	70.3	81.0	...
1950	...	74.5	77.6	...	...	...	70.4	...	...	...	...	72.7	81.2	...
1951	...	82.8	86.3	...	...	...	73.2	...	...	...	...	76.5	81.5	...
1952	...	84.3	87.8	...	...	...	76.2	...	...	...	...	78.0	82.6	...
1953	...	83.0	86.2	68.9	76.5	...	80.3	...	71.2	83.0	...	81.5	84.2	...
1954	...	82.8	85.8	70.1	78.2	...	83.2	...	72.4	83.5	...	81.2	85.3	...
1955	...	81.6	84.1	70.8	79.1	...	84.3	...	74.1	85.1	...	82.3	87.5	...
1956	...	82.2	84.4	72.2	80.4	...	85.9	...	77.2	87.3	...	85.9	88.4	...
1957	...	84.9	87.2	74.9	83.4	...	87.5	...	80.5	89.9	...	90.3	89.3	...
1958	...	88.5	91.0	77.2	85.1	...	89.1	...	81.8	91.7	...	88.7	92.4	...
1959	...	87.1	88.8	79.3	86.0	...	90.4	...	83.2	93.8	...	89.8	94.7	...
1960	...	88.0	89.6	81.4	87.8	...	91.7	...	84.6	95.9	...	89.2	98.6	...
1961	...	89.1	90.4	83.2	88.5	...	92.9	...	85.9	97.1	...	91.0	99.4	...
1962	...	89.9	91.0	85.4	89.6	...	94.0	...	86.5	97.3	...	91.5	99.4	...
1963	...	91.2	92.2	87.3	90.7	...	95.0	...	87.7	98.2	...	93.2	99.4	...
1964	...	92.4	93.2	88.9	92.2	...	95.9	...	89.5	98.4	...	92.7	99.4	...
1965	...	94.4	95.5	90.9	93.8	...	96.9	...	91.3	98.3	...	94.6	99.4	...
1966	...	99.1	100.3	95.1	96.8	...	98.2	...	95.2	98.8	...	97.0	99.6	...
1967	100.0	100.0	100.0	100.0	100.0	...	100.0	...	100.0	100.0	100.0	100.0	100.0	100.0
1968	103.6	103.6	103.2	105.2	104.8	...	102.4	...	106.1	101.3	101.4	103.1	100.9	101.2
1969	108.8	108.9	108.2	111.6	113.3	...	105.7	...	115.0	103.6	103.4	105.6	102.8	104.0
1970	114.7	114.9	113.7	119.9	123.6	...	110.1	...	124.0	107.6	107.9	110.1	107.3	107.4
1971	118.3	118.4	116.4	126.1	128.8	...	115.2	...	133.7	115.0	115.3	117.5	114.7	114.7
1972	123.2	123.5	121.6	131.1	134.5	...	119.2	...	140.7	120.1	120.1	118.5	120.5	120.6
1973	139.5	141.4	141.4	141.4	140.7	...	124.3	...	151.0	126.9	128.4	136.0	126.4	124.1
1974	158.7	161.7	162.4	159.4	154.4	...	130.6	...	171.6	150.2	160.7	214.6	145.8	130.3
1975	172.1	175.4	175.8	174.3	169.7	...	137.3	...	187.6	167.8	183.8	235.3	169.6	137.1
1976	177.4	180.8	179.5	186.1	179.0	...	144.7	...	199.6	182.7	202.3	250.8	189.0	145.4
1977	188.0	192.2	190.2	200.3	191.1	...	153.5	...	214.7	202.2	228.6	283.4	213.4	152.0
1978	206.3	211.4	210.2	218.4	210.4	...	164.0	...	233.0	216.0	247.4	298.3	232.6	158.3
1979	228.5	234.5	232.9	242.9	239.7	...	176.0	...	256.4	239.3	286.4	403.1	257.8	159.5
1980	248.0	254.6	251.5	267.0	281.7	...	191.6	...	285.7	278.6	349.4	556.0	301.8	165.2
1981	267.3	274.6	269.9	291.0	314.7	...	208.2	...	314.4	319.2	407.0	675.9	345.9	181.0
1982	278.2	285.7	279.2	306.5	337.0	...	224.0	...	334.1	350.8	446.2	667.9	393.8	200.2
1983	284.4	291.7	282.2	319.9	344.8	103.0	236.9	102.5	346.3	370.3	469.2	628.0	428.7	213.7
1984	295.1	302.9	292.6	333.4	361.7	108.6	249.3	107.3	359.2	387.3	485.5	641.8	445.2	230.2
1985	302.0	309.8	296.8	346.6	382.0	115.4	264.6	113.1	368.9	393.6	488.1	619.5	452.7	240.7
1986	311.8	319.7	305.3	360.1	402.9	121.9	280.0	119.4	373.8	384.7	463.1	501.5	446.7	253.1
1985: Jan	299.3	307.3	296.1	339.9	371.2	111.8	257.1	110.0	366.0	387.2	481.2	621.6	444.1	235.3
Feb	301.4	309.5	298.6	341.4	373.3	112.4	258.4	110.7	366.8	386.5	480.8	623.4	443.3	234.3
Mar	301.6	309.7	298.4	342.6	374.3	112.9	259.2	110.8	370.0	388.2	482.2	620.8	445.5	236.3
Apr	301.6	309.6	297.7	343.9	375.9	113.5	260.4	111.3	368.0	388.7	483.0	623.5	445.9	236.4
May	301.0	308.9	296.2	345.1	379.5	114.5	262.6	112.4	366.2	393.0	490.0	620.8	454.7	236.8
June	301.4	309.3	296.0	346.9	381.0	115.1	263.6	112.8	367.6	399.4	497.7	612.0	465.6	241.1
July	301.6	309.5	296.2	347.3	383.2	115.8	265.0	113.5	367.8	399.9	497.3	601.9	467.1	242.8
Aug	301.8	309.7	295.9	348.4	385.9	116.6	266.6	114.3	370.6	398.9	494.4	594.6	465.1	244.2
Sept	302.1	309.9	295.6	349.9	386.9	117.0	267.7	114.6	368.7	400.5	496.8	601.7	466.5	244.6
Oct	302.5	309.8	295.3	350.3	389.1	117.9	269.9	115.1	368.5	395.6	488.4	615.3	453.9	244.7
Nov	303.6	311.0	296.6	351.3	391.3	118.4	271.7	115.8	372.7	392.1	481.5	641.6	440.5	245.9
Dec	305.6	313.2	299.3	352.1	392.3	118.3	272.4	116.3	373.7	393.3	483.6	657.3	439.9	245.8
1986: Jan	307.9	315.6	302.5	353.1	393.8	118.8	273.4	116.7	379.1	394.6	484.7	650.3	442.6	247.3
Feb	307.7	315.3	301.5	354.2	394.8	119.0	273.7	117.0	379.6	390.0	476.3	591.2	444.5	247.9
Mar	307.8	315.4	301.2	355.5	397.0	119.6	275.0	117.9	367.5	385.5	467.6	549.9	442.3	249.0
Apr	308.5	316.1	301.5	357.0	400.1	120.9	277.9	118.7	367.6	381.8	459.6	518.3	439.2	251.3
May	309.4	317.0	302.1	358.8	400.9	121.1	278.4	118.9	367.1	382.5	460.6	496.8	444.6	251.5
June	309.5	317.1	301.6	360.2	401.6	121.6	279.4	119.0	366.6	393.8	477.0	486.5	466.0	255.2
July	312.2	320.1	305.5	360.8	403.5	122.5	281.2	119.4	369.2	389.4	469.2	459.4	462.3	255.6
Aug	314.6	322.7	308.9	361.8	405.2	122.9	281.7	119.9	376.4	389.5	469.0	447.3	464.5	255.9
Sept	315.1	323.2	309.0	363.3	407.6	123.6	283.2	120.7	376.2	388.3	467.2	453.5	461.1	255.6
Oct	315.6	323.7	309.5	364.0	409.5	124.0	284.6	121.3	379.0	379.1	450.3	451.9	441.4	257.1
Nov	316.4	324.6	309.9	365.8	410.2	124.3	285.6	121.5	377.1	371.1	437.8	452.0	426.7	255.4
Dec	317.0	325.2	310.2	367.1	410.4	124.2	286.0	121.6	380.0	371.0	438.1	460.6	425.3	254.9

See next page for continuation of table.

Table B-56.—*Consumer price indexes, selected expenditure classes, 1946–86*—Continued

[1967 = 100]

Year or month	Transportation								Medical care		
	Total	Private transportation						Public transportation	Total	Medical care commodities	Medical care services
		Total [2]	New cars	Used cars	Motor fuel [3]	Automobile maintenance and repair	Other				
1946	50.3	54.3			54.9	52.0		34.4	44.4	76.2	40.1
1947	55.5	61.5	69.2		62.2	56.4		36.0	48.1	81.8	43.5
1948	61.8	68.2	75.6		70.4	59.6		40.7	51.1	86.1	46.4
1949	66.4	72.3	82.8		72.3	61.1		45.2	52.7	87.4	48.1
1950	68.2	72.5	83.4		71.8	62.3		48.9	53.7	88.5	49.2
1951	72.5	75.8	87.4		73.9	67.0		54.0	56.3	91.0	51.7
1952	77.3	80.8	94.9		75.8	68.6		57.5	59.3	91.8	55.0
1953	79.5	82.4	95.8	89.2	80.3	72.3		61.3	61.4	92.6	57.0
1954	78.3	80.3	94.3	75.9	82.5	74.8		65.5	63.4	93.7	58.7
1955	77.4	78.9	90.9	71.8	83.6	76.5		67.4	64.8	94.7	60.4
1956	78.8	80.1	93.5	69.1	86.5	79.5		70.0	67.2	96.7	62.8
1957	83.3	84.7	98.4	77.4	90.0	82.4		72.7	69.9	99.3	65.5
1958	86.0	87.4	101.5	80.2	88.8	83.7		76.1	73.2	102.8	68.7
1959	89.6	91.1	105.9	89.5	89.9	85.5		78.3	76.4	104.4	72.0
1960	89.6	90.6	104.5	83.6	92.5	87.2		81.0	79.1	104.5	74.9
1961	90.6	91.3	104.5	86.9	91.4	89.3		84.6	81.4	103.3	77.7
1962	92.5	93.0	104.1	94.8	91.9	90.4		87.4	83.5	101.7	80.2
1963	93.0	93.4	103.5	96.0	91.8	91.6		88.5	85.6	100.8	82.6
1964	94.3	94.7	103.2	100.1	91.4	92.8		90.1	87.3	100.5	84.6
1965	95.9	96.3	100.9	99.4	94.9	94.5		91.9	89.5	100.2	87.3
1966	97.2	97.5	99.1	97.0	97.0	96.2		95.2	93.4	100.5	92.0
1967	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
1968	103.2	103.0	102.8	(4)	101.4	105.5	103.4	104.6	106.1	100.2	107.3
1969	107.2	106.5	104.4	103.1	104.7	112.2	109.7	112.7	113.4	101.3	116.0
1970	112.7	111.1	107.6	104.3	105.6	120.6	119.2	128.5	120.6	103.6	124.2
1971	118.6	116.6	112.0	110.2	106.3	129.2	128.4	137.7	128.4	105.4	133.3
1972	119.9	117.5	111.0	110.5	107.6	135.1	129.1	143.4	132.5	105.6	138.2
1973	123.8	121.5	111.1	117.6	118.1	142.2	127.8	144.8	137.7	105.9	144.3
1974	137.7	136.6	117.5	122.6	159.9	156.8	132.4	148.0	150.5	109.6	159.1
1975	150.6	149.8	127.6	146.4	170.8	176.6	141.2	158.6	168.6	118.8	179.1
1976	165.5	164.6	135.7	167.9	177.9	189.7	163.1	174.2	184.7	126.0	197.1
1977	177.2	176.6	142.9	182.8	188.2	203.7	177.3	182.4	202.4	134.1	216.7
1978	185.5	185.0	153.8	186.5	196.3	220.6	184.6	187.8	219.4	143.5	235.4
1979	212.0	212.3	166.0	201.0	265.6	242.6	198.6	200.3	239.7	153.8	258.3
1980	249.7	249.2	179.3	208.1	369.1	268.3	222.6	251.6	265.9	168.1	287.4
1981	280.0	277.5	190.2	256.9	410.9	293.6	241.3	312.0	294.5	186.5	318.2
1982	291.5	287.5	197.6	296.4	389.4	315.8	257.8	346.0	328.7	205.7	356.0
1983	298.4	293.9	202.6	329.7	376.4	330.0	260.8	362.6	357.3	223.3	387.0
1984	311.7	306.6	208.5	375.7	370.7	341.5	273.3	385.2	379.5	239.7	410.3
1985	319.9	314.2	215.2	379.7	373.8	351.4	287.6	402.8	403.1	256.7	435.1
1986	307.5	299.5	224.4	363.2	292.1	363.1	303.9	426.4	433.5	273.6	468.6
1985: Jan	314.7	309.1	213.1	382.8	357.6	346.9	283.9	394.5	391.1	248.2	422.4
Feb	314.3	308.7	213.9	384.6	352.4	348.2	284.4	394.4	393.8	249.8	425.3
Mar	316.7	311.0	214.1	386.1	360.6	348.5	284.5	397.3	396.5	251.9	428.1
Apr	320.0	314.6	214.1	386.4	374.2	348.2	285.8	398.0	398.0	253.9	429.4
May	321.4	316.0	214.5	384.2	381.6	349.6	285.6	398.4	399.5	255.2	430.9
June	321.8	316.3	214.7	380.3	384.7	350.4	286.6	399.3	401.7	257.0	433.0
July	321.8	316.1	214.7	376.7	385.5	351.1	287.6	402.4	404.0	257.8	435.8
Aug	320.7	314.9	214.6	374.0	381.9	351.9	287.7	403.7	406.6	259.3	438.6
Sept	319.7	313.6	214.5	374.3	377.7	353.5	285.8	408.0	408.3	260.2	440.5
Oct	320.9	314.7	216.2	375.3	374.6	355.7	289.6	411.5	410.5	261.3	443.0
Nov	323.2	317.0	218.4	376.4	376.7	355.8	293.9	412.8	413.0	262.7	445.8
Dec	324.0	317.8	219.4	375.6	377.5	357.5	295.2	412.9	414.7	262.9	448.0
1986: Jan	323.9	317.3	219.9	374.1	373.3	357.9	297.7	419.6	418.2	264.5	451.9
Feb	319.2	312.2	220.4	370.7	351.5	358.9	299.2	422.2	422.3	267.4	456.2
Mar	309.6	302.1	220.3	367.2	308.5	359.3	301.5	421.2	425.8	269.4	460.1
Apr	303.3	295.3	221.2	364.8	279.5	360.6	301.6	422.2	428.0	271.3	462.3
May	305.7	297.8	223.0	363.6	289.3	361.3	301.3	423.7	429.7	272.3	464.2
June	308.6	300.8	224.2	362.5	299.4	362.1	303.0	425.4	432.0	273.3	466.8
July	304.7	296.5	224.7	360.3	280.2	363.4	304.5	428.0	434.8	275.4	469.8
Aug	301.3	292.8	224.7	358.0	265.9	364.3	304.5	428.0	437.5	276.0	473.0
Sept	302.2	293.7	224.5	359.5	271.1	365.0	302.3	428.5	439.7	276.7	475.7
Oct	302.6	294.1	227.1	360.6	263.2	365.7	307.6	428.7	442.3	277.5	478.8
Nov	304.3	295.8	230.7	361.0	260.9	368.4	311.6	431.7	444.6	278.2	481.5
Dec	304.8	295.9	232.2	356.6	261.9	370.7	312.0	437.5	446.8	280.8	483.4

[1] Includes alcoholic beverages, not shown separately.

[2] Includes direct pricing of new trucks and motorcycles, beginning September 198

[3] Includes direct pricing of diesel fuel and gasohol beginning September 1981.

[4] Not available.

Note.—Data beginning 1978 are for all urban consumers; earlier data are for urban wage earners and clerical workers. See also Note, Table B-55.

Source: Department of Labor, Bureau of Labor Statistics.

TABLE B-57.—*Consumer price indexes, commodities, services, and special groups, 1940–86*

[1967=100]

Year or month	All items	Commodities					Services			Special indexes			
		All commodities	Food	Commodities less food			All services	Medical care services	Services less medical care	All items less food	All items less energy	All items less food and energy	Energy [1]
				All	Durable	Nondurable							
1940	42.0	40.6	35.2	48.0	48.1	44.7	43.6	32.5	....	47.3	....	....	....
1941	44.1	43.3	38.4	50.4	51.4	46.7	44.2	32.7	....	48.7	....	....	....
1942	48.8	49.6	45.1	56.0	58.4	51.6	45.6	33.7	....	52.1	....	....	....
1943	51.8	54.0	50.3	58.4	60.3	53.8	46.4	35.4	....	53.6	....	....	....
1944	52.7	54.7	49.6	61.6	65.9	56.6	47.5	36.9	....	55.7	....	....	....
1945	53.9	56.3	50.7	64.1	70.9	58.6	48.2	37.9	....	56.9	....	....	....
1946	58.5	62.4	58.1	68.1	74.1	62.9	49.1	40.1	....	59.4	....	....	....
1947	66.9	75.0	70.6	76.8	80.3	72.2	51.1	43.5	....	64.9	....	....	....
1948	72.1	80.4	76.6	82.7	86.2	77.8	54.3	46.4	....	69.6	....	....	....
1949	71.4	78.3	73.5	81.5	87.4	76.3	56.9	48.1	....	70.3	....	....	....
1950	72.1	78.8	74.5	81.4	88.4	76.2	58.7	49.2	....	71.1	....	....	....
1951	77.8	85.9	82.8	87.5	95.1	82.0	61.8	51.7	....	75.7	....	....	....
1952	79.5	87.0	84.3	88.3	96.4	82.4	64.5	55.0	....	77.5	....	....	....
1953	80.1	86.7	83.0	88.5	95.7	83.1	67.3	57.0	....	79.0	....	....	....
1954	80.5	85.9	82.8	87.5	93.3	83.5	69.5	58.7	....	79.5	....	....	....
1955	80.2	85.1	81.6	86.9	91.5	83.5	70.9	60.4	....	79.7	....	....	....
1956	81.4	85.9	82.2	87.8	91.5	85.3	72.7	62.8	....	81.1	....	....	....
1957	84.3	88.6	84.9	90.5	94.4	87.6	75.6	65.5	77.6	83.8	83.9	83.3	90.1
1958	86.6	90.6	88.5	91.5	95.9	88.2	78.5	68.7	80.4	85.7	86.3	85.2	90.3
1959	87.3	90.7	87.1	92.7	97.3	89.3	80.8	72.0	82.5	87.3	87.0	87.0	91.8
1960	88.7	91.5	88.0	93.1	96.7	90.7	83.5	74.9	85.2	88.8	88.3	88.3	94.2
1961	89.6	92.0	89.1	93.4	96.6	91.2	85.2	77.7	86.7	89.7	89.3	89.3	94.4
1962	90.6	92.8	89.9	94.1	97.6	91.8	86.8	80.2	88.1	90.8	90.4	90.5	94.7
1963	91.7	93.6	91.2	94.8	97.9	92.7	88.5	82.6	89.6	92.0	91.6	91.6	95.0
1964	92.9	94.6	92.4	95.6	98.8	93.5	90.2	84.6	91.2	93.2	92.9	93.0	94.6
1965	94.5	95.7	94.4	96.2	98.4	94.8	92.2	87.3	93.2	94.5	94.3	94.3	96.3
1966	97.2	98.2	99.1	97.5	98.5	97.0	95.8	92.0	96.4	96.7	97.3	96.6	97.8
1967	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
1968	104.2	103.7	103.6	103.7	103.1	104.1	105.2	107.3	104.9	104.4	104.4	104.6	101.5
1969	109.8	108.4	106.9	108.1	107.0	108.8	112.5	116.0	112.0	110.1	110.3	110.7	104.2
1970	116.3	113.5	114.9	112.5	111.8	113.1	121.6	124.2	121.3	116.7	117.0	117.6	107.0
1971	121.3	117.4	118.4	116.8	116.5	117.0	128.4	133.3	127.7	122.1	122.0	123.1	111.2
1972	125.3	120.9	123.5	119.4	118.9	119.8	133.3	138.2	132.6	125.8	126.1	126.9	114.3
1973	133.1	129.9	141.4	123.5	121.9	124.8	139.1	144.3	138.3	130.7	133.8	131.3	123.5
1974	147.7	145.5	161.7	136.6	130.6	140.9	152.1	159.1	151.0	143.7	146.9	142.2	159.7
1975	161.2	158.4	175.4	149.1	145.5	151.7	166.6	179.1	164.7	157.1	160.2	155.3	176.6
1976	170.5	165.2	180.8	156.6	154.3	158.3	180.4	197.1	177.7	167.5	169.2	165.5	189.3
1977	181.5	174.7	192.2	165.1	163.2	166.5	194.3	216.7	190.6	178.4	179.8	175.8	207.3
1978	195.4	187.1	211.4	174.7	173.9	174.3	210.9	235.4	206.9	191.2	193.8	188.7	220.4
1979	217.4	208.4	234.5	195.1	191.1	198.7	234.2	258.3	230.1	213.0	213.1	207.0	275.9
1980	246.8	233.9	254.6	222.0	210.4	235.2	270.3	287.4	266.6	244.0	238.0	232.8	361.1
1981	272.4	253.6	274.6	241.2	227.1	257.5	305.7	318.2	302.2	270.6	261.7	257.1	410.0
1982	289.1	263.8	285.7	250.9	241.1	261.6	333.3	356.0	328.6	288.4	279.3	276.1	416.1
1983	298.4	271.5	291.7	259.0	253.0	266.3	344.9	387.0	338.1	298.3	289.3	287.0	419.3
1984	311.1	280.7	302.9	267.0	266.5	270.8	363.0	410.3	355.6	311.3	302.9	301.2	423.6
1985	322.2	286.7	309.8	272.5	270.7	277.2	381.5	435.1	373.3	323.3	314.8	314.4	426.5
1986	328.4	283.9	319.7	263.4	270.2	262.2	400.5	468.6	390.6	328.6	327.0	327.1	370.3
1985: Jan	316.1	282.7	307.3	267.8	270.2	269.7	372.1	422.4	364.3	316.3	309.2	307.9	414.5
Feb	317.4	284.0	309.5	268.6	271.4	270.2	373.5	425.3	365.5	317.4	310.9	309.5	411.4
Mar	318.8	285.3	309.7	270.6	271.9	273.2	375.0	428.1	366.9	319.1	312.0	310.8	416.6
Apr	320.1	286.8	309.6	272.8	272.6	276.5	376.2	429.4	368.1	320.8	312.7	311.8	424.4
May	321.3	287.0	308.9	273.4	271.6	278.0	378.9	430.9	370.9	322.4	313.3	312.8	431.7
June	322.3	286.9	309.3	273.1	270.4	278.4	381.3	433.0	373.3	323.6	313.9	313.4	436.8
July	322.8	286.5	309.5	272.4	269.3	277.9	383.3	435.8	375.2	324.2	314.5	314.1	437.1
Aug	323.5	286.5	309.7	272.3	268.6	278.1	384.9	438.6	376.7	325.0	315.6	315.3	433.8
Sept	324.5	287.1	309.9	273.1	268.7	279.6	386.5	440.5	378.3	326.2	316.8	316.9	432.6
Oct	325.5	287.9	309.8	274.4	270.2	280.7	387.7	443.0	379.3	327.4	318.4	318.9	427.1
Nov	326.6	289.2	311.0	275.7	271.5	282.0	388.7	445.8	380.1	328.5	319.8	320.4	425.1
Dec.	327.4	289.9	313.2	275.7	271.4	282.0	389.5	448.0	380.8	328.9	320.5	320.7	426.5
1986: Jan	328.4	290.1	315.6	274.7	271.4	280.4	391.7	451.9	382.7	329.5	321.8	321.6	424.7
Feb	327.5	287.4	315.3	270.9	270.5	274.5	393.3	456.2	384.0	328.5	322.3	322.3	408.9
Mar	326.0	283.7	315.4	265.2	269.7	265.6	394.9	460.1	385.4	326.6	323.3	323.6	381.3
Apr	325.3	281.2	316.1	261.2	269.2	259.2	396.8	462.3	387.2	325.7	324.4	324.8	361.8
May	326.3	282.1	317.0	262.1	269.6	260.5	397.9	464.2	388.3	326.7	325.0	325.3	367.6
June	327.9	282.8	317.1	263.0	269.9	261.8	401.0	466.8	391.3	328.6	325.5	325.9	380.6
July	328.0	281.9	320.1	260.2	269.6	257.3	402.3	469.8	392.5	328.0	326.9	326.9	366.5
Aug	328.6	281.9	322.7	259.0	269.0	255.6	403.7	473.0	393.6	328.1	328.3	327.9	358.6
Sept	330.2	283.5	323.2	261.1	269.3	258.9	405.5	475.7	395.4	330.0	330.0	329.9	360.6
Oct	330.5	283.6	323.7	260.9	270.5	257.8	406.1	478.8	395.7	330.2	331.4	331.6	348.6
Nov	330.8	284.0	324.6	261.2	271.8	257.4	406.1	481.5	395.4	330.4	332.3	332.5	341.7
Dec	331.1	284.2	325.2	261.2	271.7	257.5	406.6	483.4	395.8	330.6	332.6	332.8	342.4

[1] Fuel oil, coal, and bottled gas; gas (piped) and electricity; and motor fuel. Motor oil, coolant, etc. also included through 1982.

Note.—Data beginning 1978 are for all urban consumers; earlier data are for urban wage earners and clerical workers. See also Note, Table B-55.

Source: Department of Labor, Bureau of Labor Statistics.

TABLE B-58.—*Changes in special consumer price indexes, 1958–86*

[Percent change]

Year or month	All items		All items less food		All items less energy		All items less food and energy		All items less food, energy, and shelter	
	Dec. to Dec.[1]	Year to year	Dec. to Dec.[1]	Year to year	Dec. to Dec.[1]	Year to year	Dec. to Dec.[1]	Year to year	Dec. to Dec.[1]	Year to year
1958	1.8	2.7	1.6	2.3	1.9	2.9	1.8	2.3	....	....
1959	1.5	.8	2.3	1.9	1.4	.8	2.2	2.1	....	....
1960	1.5	1.6	1.0	1.7	1.4	1.5	.8	1.5	....	....
1961	.7	1.0	1.1	1.0	.8	1.1	1.5	1.1	....	....
1962	1.2	1.1	1.2	1.2	1.2	1.2	1.1	1.3	....	....
1963	1.6	1.2	1.6	1.3	1.8	1.3	1.8	1.2	....	....
1964	1.2	1.3	1.0	1.3	1.3	1.4	1.2	1.5	....	....
1965	1.9	1.7	1.6	1.4	1.9	1.5	1.5	1.4	....	....
1966	3.4	2.9	3.3	2.3	3.5	3.2	3.3	2.4	....	....
1967	3.0	2.9	3.5	3.4	3.1	2.8	3.9	3.5	....	....
1968	4.7	4.2	4.9	4.4	4.9	4.4	5.1	4.6	4.6	4.6
1969	6.1	5.4	5.7	5.5	6.4	5.7	6.1	5.8	5.0	4.8
1970	5.5	5.9	6.5	6.0	5.6	6.1	6.6	6.2	5.7	5.1
1971	3.4	4.3	3.1	4.6	3.3	4.3	3.1	4.7	3.2	4.9
1972	3.4	3.3	3.0	3.0	3.5	3.4	3.0	3.1	2.6	2.4
1973	8.8	6.2	5.6	3.9	8.3	6.1	4.7	3.5	3.5	3.0
1974	12.2	11.0	12.2	9.9	11.5	9.8	11.3	8.3	11.3	7.6
1975	7.0	9.1	7.1	9.3	6.7	9.1	6.7	9.2	6.4	8.9
1976	4.8	5.8	6.2	5.6	4.6	5.6	6.1	6.6	7.0	7.0
1977	6.8	6.5	6.3	6.5	6.8	6.3	6.4	6.2	5.2	6.0
1978	9.0	7.7	8.5	7.2	9.2	7.8	8.5	7.3	6.5	5.7
1979	13.3	11.3	14.0	11.4	11.1	10.0	11.3	9.7	7.2	6.9
1980	12.4	13.5	12.9	14.6	11.7	11.7	12.1	12.5	9.9	8.8
1981	8.9	10.4	9.9	10.9	8.6	10.0	9.6	10.4	9.4	9.5
1982	3.9	6.1	4.0	6.6	4.2	6.7	4.5	7.4	6.1	7.7
1983	3.8	3.2	4.1	3.4	4.4	3.6	4.9	3.9	5.0	5.2
1984	4.0	4.3	4.0	4.4	4.5	4.7	4.7	4.9	4.4	5.0
1985	3.8	3.6	4.0	3.9	4.0	3.9	4.4	4.4	3.7	3.8
1986	1.1	1.9	.5	1.6	3.8	3.9	3.8	4.0	3.4	3.4
	Change from preceding month									
	Unadjusted	Seasonally adjusted	Unadjusted	Seasonally adjusted	Unadjusted	Seasonally adjusted	Unadjusted	Seasonally adjusted	Unadjusted	Seasonally adjusted
1985: Jan	0.2	0.2	0.0	0.2	0.3	0.3	0.2	0.3	0.2	0.4
Feb	.4	.3	.3	.3	.5	.5	.5	.6	.5	.5
Mar	.4	.5	.5	.5	.4	.3	.4	.4	.5	.4
Apr	.4	.3	.5	.4	.2	.3	.3	.3	.3	.3
May	.4	.2	.5	.3	.2	.2	.3	.3	0	−.0
June	.3	.2	.4	.3	.2	.3	.2	.3	.1	.2
July	.2	.2	.2	.2	.2	.2	.2	.3	.1	.2
Aug	.2	.2	.2	.2	.3	.3	.4	.3	.2	.2
Sept	.3	.2	.4	.2	.4	.2	.5	.2	.6	.2
Oct	.3	.4	.4	.4	.5	.4	.6	.5	.7	.5
Nov	.3	.6	.3	.5	.4	.5	.5	.5	.4	.5
Dec	.2	.4	.1	.3	.2	.4	.1	.3	.0	.3
1986: Jan	.3	.3	.2	.4	.4	.4	.3	.4	.2	.5
Feb	−.3	−.4	−.3	−.3	.2	.0	.2	.2	.2	.2
Mar	−.5	−.4	−.6	−.5	.3	.3	.4	.4	.3	.2
Apr	−.2	−.3	−.3	−.4	.3	.4	.4	.4	.2	.2
May	.3	.2	.3	.1	.2	.2	.2	.1	.1	.1
June	.5	.5	.6	.6	.2	.2	.2	.3	.2	.3
July	.0	.0	−.2	−.2	.4	.5	.3	.4	.2	.3
Aug	.2	.2	.0	.0	.4	.4	.3	.3	.3	.3
Sept	.5	.3	.6	.3	.5	.3	.6	.3	.6	.2
Oct	.1	.2	.1	.1	.4	.4	.5	.4	.5	.4
Nov	.1	.3	.1	.2	.3	.4	.3	.3	.3	.3
Dec	.1	.2	.1	.3	.1	.2	.1	.3	.1	.3

[1] Changes from December to December are based on unadjusted indexes.

Note.—Data beginning 1978 are for all urban consumers; earlier data are for urban wage earners and clerical workers. See also Note, Table B–55.

Source: Department of Labor, Bureau of Labor Statistics.

TABLE B–59.—*Changes in consumer price indexes, commodities and services, 1929–86*

[Percent change]

Year	All items		Commodities						Services				Energy[2]	
	Dec. to Dec.[1]	Year to year	Total		Food		Commodities less food		Total		Medical care services		Dec. to Dec.[1]	Year to year
			Dec. to Dec.[1]	Year to year	Dec. to Dec.[1]	Year to year	Dec. to Dec.[1]	Year to year	Dec. to Dec.[1]	Year to year	Dec. to Dec.[1]	Year to year		
1929	0.2	0	....	....	2.3	1.3	....	....	....	....	....	....	....	....
1933	.5	−5.1	....	....	7.0	−2.9	....	....	....	....	....	....	....	....
1939	−.5	−1.4	−1.0	−2.0	−2.5	−2.8	0.2	−1.6	0.2	0.2	0.3	0.3	....	....
1940	1.0	1.0	1.2	1.0	2.6	1.7	.4	.6	.7	.2	0	0	....	....
1941	9.7	5.0	13.5	6.7	16.4	9.1	10.8	5.0	2.5	1.4	1.5	.6	....	....
1942	9.3	10.7	13.0	14.5	17.5	17.4	6.4	11.1	2.0	3.2	3.9	3.1	....	....
1943	3.2	6.1	4.0	8.9	3.1	11.5	5.4	4.3	2.6	1.8	5.8	5.0	....	....
1944	2.1	1.7	2.2	1.3	.2	−1.4	5.0	5.5	1.7	2.4	2.8	4.2	....	....
1945	2.3	2.3	2.9	2.9	3.0	2.2	3.0	4.1	1.0	1.5	2.9	2.7	....	....
1946	18.2	8.5	24.9	10.8	31.5	14.6	12.9	6.2	3.5	1.9	8.9	5.8	....	....
1947	9.0	14.4	10.4	20.2	11.2	21.5	9.1	12.8	5.2	4.1	6.5	8.5	....	....
1948	2.7	7.8	1.7	7.2	−.8	8.5	5.3	7.7	6.1	6.3	7.0	6.7	....	....
1949	−1.8	−1.0	−4.1	−2.6	−3.7	−4.0	−4.8	−1.5	3.6	4.8	2.1	3.7	....	....
1950	5.8	1.0	7.7	.6	9.6	1.4	5.7	−.1	3.6	3.2	3.3	2.3	....	....
1951	5.9	7.9	5.9	9.0	7.4	11.1	4.6	7.5	5.2	5.3	5.8	5.1	....	....
1952	.9	2.2	−.7	1.3	−1.1	1.8	−.5	.9	4.6	4.4	5.5	6.4	....	....
1953	.6	.8	−.6	−.3	−1.3	−1.5	.2	.2	4.2	4.3	3.6	3.6	....	....
1954	−.5	.5	−1.4	−.9	−1.6	−.2	−1.4	−1.1	1.9	3.3	2.6	3.0	....	....
1955	.4	−.4	−.4	−.9	−.9	−1.4	0	−.7	2.3	2.0	3.2	2.9	....	....
1956	2.9	1.5	2.6	.9	3.1	.7	2.5	1.0	3.1	2.5	4.1	4.0	....	....
1957	3.0	3.6	2.6	3.1	2.8	3.3	2.2	3.1	4.5	4.0	4.5	4.3	....	....
1958	1.8	2.7	1.3	2.3	2.2	4.2	.8	1.1	2.7	3.8	4.9	4.9	−0.7	0.2
1959	1.5	.8	.6	.1	−.8	−1.6	1.5	1.3	3.7	2.9	4.6	4.8	4.3	1.7
1960	1.5	1.6	1.1	.9	3.1	1.0	−.3	.4	2.7	3.3	3.8	4.0	1.5	2.6
1961	.7	1.0	0	.5	−.9	1.3	.6	.3	1.9	2.0	3.5	3.7	−1.1	.2
1962	1.2	1.1	1.0	.9	1.5	.9	.7	.7	1.7	1.9	3.0	3.2	2.1	.3
1963	1.6	1.2	1.4	.9	1.9	1.4	1.2	.7	2.3	2.0	2.6	3.0	−.8	.3
1964	1.2	1.3	.8	1.1	1.4	1.3	.4	.8	1.8	1.9	2.6	2.4	−.2	−.4
1965	1.9	1.7	1.6	1.2	3.4	2.2	.7	.6	2.6	2.2	3.5	3.2	2.0	1.8
1966	3.4	2.9	2.5	2.6	3.9	5.0	1.9	1.4	4.9	3.9	8.1	5.4	1.8	1.6
1967	3.0	2.9	2.5	1.8	1.2	.9	3.1	2.6	4.0	4.4	7.9	8.7	1.4	2.2
1968	4.7	4.2	3.8	3.7	4.3	3.6	3.7	3.7	6.1	5.2	7.4	7.3	1.7	1.5
1969	6.1	5.4	5.5	4.5	7.2	5.1	4.5	4.2	7.4	6.9	7.0	8.1	3.1	2.7
1970	5.5	5.9	4.0	4.7	2.2	5.5	4.8	4.1	8.2	8.1	8.3	7.1	4.5	2.7
1971	3.4	4.3	2.9	3.4	4.3	3.0	2.3	3.8	4.1	5.6	5.3	7.3	3.1	3.9
1972	3.4	3.3	3.4	3.0	4.7	4.3	2.5	2.2	3.6	3.8	3.8	3.7	2.8	2.8
1973	8.8	6.2	10.4	7.4	20.1	14.5	5.0	3.4	6.2	4.4	5.8	4.4	16.8	8.0
1974	12.2	11.0	12.7	12.0	12.2	14.4	13.2	10.6	11.3	9.3	13.3	10.3	21.6	29.3
1975	7.0	9.1	6.3	8.9	6.5	8.5	6.2	9.2	8.1	9.5	10.3	12.6	11.6	10.6
1976	4.8	5.8	3.3	4.3	.6	3.1	5.1	5.0	7.3	8.3	10.7	10.1	6.9	7.2
1977	6.8	6.5	6.1	5.8	8.0	6.3	4.9	5.4	7.9	7.7	9.0	9.9	7.2	9.5
1978	9.0	7.7	8.9	7.1	11.8	10.0	7.7	5.8	9.3	8.5	9.2	8.6	8.0	6.3
1979	13.3	11.3	13.0	11.4	10.2	10.9	14.3	11.7	13.7	11.0	10.6	9.7	37.4	25.2
1980	12.4	13.5	11.1	12.2	10.2	8.6	11.5	13.8	14.2	15.4	10.0	11.3	18.1	30.9
1981	8.9	10.4	6.0	8.4	4.3	7.9	6.7	8.6	13.0	13.1	12.7	10.7	11.9	13.5
1982	3.9	6.1	3.6	4.0	3.1	4.0	3.8	4.0	4.3	9.0	11.2	11.9	1.3	1.5
1983	3.8	3.2	2.9	2.9	2.6	2.1	3.1	3.2	4.8	3.5	6.1	8.7	−.5	.8
1984	4.0	4.3	2.6	3.4	3.8	3.8	2.0	3.1	5.4	5.2	5.8	6.0	.2	1.0
1985	3.8	3.6	2.5	2.1	2.7	2.3	2.4	2.1	5.1	5.1	6.8	6.0	1.8	.7
1986	1.1	1.9	−2.0	−1.0	3.8	3.2	−5.3	−3.3	4.4	5.0	7.9	7.7	−19.7	−13.2

[1] Changes from December to December are based on unadjusted indexes.

[2] Fuel oil, coal, and bottled gas; gas (piped) and electricity; and motor fuel. Motor oil, coolant, etc. also included through 1982.

Note.—Data beginning 1978 are for all urban consumers; earlier data are for urban wage earners and clerical workers. See also Note, Table B–55.

Source: Department of Labor, Bureau of Labor Statistics.

TABLE B-60.—*Producer price indexes by stage of processing, 1947–86*

[1967 = 100]

Year or month	Finished goods										
	Total finished goods	Consumer foods			Finished goods excluding consumer foods						Total finished consumer goods
		Total	Crude	Processed	Total	Consumer goods			Capital equipment		
						Total	Durable	Nondurable			
1947	74.0	82.8	99.4	80.2	....	79.0	74.6	80.7	55.4		80.5
1948	79.9	90.4	107.1	87.6	....	84.0	79.7	85.8	60.4		86.5
1949	77.6	83.1	101.3	80.1	....	82.2	81.8	82.3	63.4		82.5
1950	79.0	84.7	92.2	83.4	....	83.5	82.7	83.6	64.9		83.9
1951	86.5	95.2	105.9	93.2	....	89.5	88.2	90.0	71.2		91.8
1952	86.0	94.3	112.8	91.3	....	88.3	88.9	87.8	72.4		90.7
1953	85.1	89.4	105.2	86.7	....	89.1	89.6	88.6	73.6		89.2
1954	85.3	88.7	94.7	87.6	....	89.4	90.3	88.9	74.5		89.1
1955	85.5	86.5	98.8	84.4	....	90.1	91.2	89.4	76.7		88.5
1956	87.9	86.3	98.7	84.3	....	92.3	94.3	91.1	82.4		89.8
1957	91.1	89.3	97.4	87.9	....	94.6	97.1	93.2	87.5		92.4
1958	93.2	94.5	103.5	93.1	....	94.7	98.4	92.6	89.8		94.4
1959	93.0	90.1	94.3	89.5	....	95.9	99.6	94.0	91.5		93.6
1960	93.7	92.1	100.6	90.7	....	96.3	99.2	94.7	91.7		94.5
1961	93.7	91.7	96.1	90.9	....	96.2	98.8	94.7	91.8		94.3
1962	94.0	92.5	97.0	91.7	....	96.0	98.3	94.8	92.2		94.6
1963	93.7	91.4	95.5	90.7	....	96.0	97.8	95.1	92.4		94.1
1964	94.1	91.9	98.2	90.8	....	95.9	98.2	94.8	93.3		94.3
1965	95.7	95.4	98.6	94.9	....	96.6	97.9	95.9	94.4		96.1
1966	98.8	101.6	104.8	101.0	....	98.1	98.5	97.8	96.8		99.4
1967	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0		100.0
1968	102.8	103.6	107.5	103.0	102.6	102.1	102.2	102.2	103.5		102.7
1969	106.6	110.0	116.0	108.9	105.4	104.6	104.0	105.0	106.9		106.6
1970	110.3	113.5	116.3	113.1	109.1	107.7	106.9	108.3	112.0		109.9
1971	113.7	115.3	115.8	115.1	113.1	111.4	110.8	111.7	116.6		112.9
1972	117.2	121.7	121.2	121.7	115.4	113.5	113.3	113.6	119.5		116.6
1973	127.9	146.4	160.7	143.9	120.1	118.6	115.4	120.5	123.5		129.2
1974	147.5	166.9	180.8	164.6	139.3	138.6	125.9	146.8	141.0		149.3
1975	163.4	181.0	181.2	181.3	156.2	153.1	138.2	163.0	162.5		163.6
1976	170.6	180.4	193.9	177.8	166.1	162.6	144.5	174.8	173.4		169.7
1977	181.7	189.9	201.0	187.3	177.7	174.3	152.8	189.3	184.6		180.7
1978	195.9	207.2	216.8	204.6	190.7	186.7	166.9	200.0	199.2		194.9
1979	217.7	226.2	233.1	223.8	213.3	211.5	183.2	231.3	216.5		217.9
1980	247.0	239.5	237.2	237.8	247.8	250.8	206.2	283.9	239.8		248.9
1981	269.8	253.6	263.8	250.6	273.3	276.5	218.6	319.6	264.3		271.3
1982	280.7	259.3	252.7	257.7	285.8	287.8	226.7	333.6	279.4		281.0
1983	285.2	261.8	258.7	260.0	290.8	291.4	233.1	335.3	287.2		284.6
1984	291.1	273.3	281.6	270.3	294.8	294.1	236.8	337.3	294.0		290.3
1985	293.7	271.2	260.0	270.0	299.0	297.3	241.5	339.3	300.5		291.8
1986 [1]	289.6	278.0	265.6	276.7	291.1	283.4	246.9	311.1	306.5		284.9
1985: Jan	292.1	273.7	255.4	273.1	296.0	294.3	240.2	334.9	297.4		290.6
Feb	292.6	275.6	279.4	273.1	295.9	293.5	240.9	332.7	299.2		290.7
Mar	292.1	273.7	275.5	271.3	296.0	293.6	240.4	333.4	299.3		290.1
Apr	293.1	272.2	279.9	269.3	297.8	295.9	240.7	337.4	299.9		291.2
May	294.1	269.5	254.2	268.7	300.1	299.0	241.4	342.4	300.3		292.4
June	294.0	268.7	237.0	269.3	300.2	299.0	241.9	342.1	300.5		292.2
July	294.8	271.2	261.5	269.9	300.5	299.2	241.9	342.4	300.8		293.1
Aug	293.5	268.7	251.2	268.1	299.5	297.8	241.8	340.0	301.0		291.4
Sept	290.0	265.7	243.5	265.5	295.9	294.7	234.5	340.3	296.3		288.2
Oct	294.7	268.2	242.3	268.3	301.3	299.4	244.9	340.3	303.5		292.3
Nov	296.4	271.8	259.2	270.7	302.4	300.7	245.0	342.6	303.8		294.4
Dec	297.2	275.0	280.4	272.3	302.4	300.7	244.3	343.2	303.7		295.4
1986: Jan	296.0	275.0	268.9	273.2	300.7	298.3	243.5	339.6	303.9		293.8
Feb	291.9	272.0	245.9	271.8	296.3	291.8	243.9	328.0	304.3		288.4
Mar	288.0	271.6	250.0	271.1	291.2	284.6	243.7	315.4	304.3		283.4
Apr	287.2	271.9	265.3	270.1	289.9	282.2	245.7	309.8	305.6		281.9
May	288.9	274.8	270.6	272.9	291.2	284.0	245.5	313.0	305.7		284.1
June	289.3	275.1	255.2	274.4	291.6	284.4	245.9	313.5	306.1		284.5
July	287.6	280.4	262.3	279.5	287.4	278.3	246.2	302.6	306.4		282.3
Aug [1]	288.1	284.0	268.9	282.9	286.8	277.5	245.8	301.6	306.2		283.0
Sept	287.5	282.2	259.6	281.6	286.6	278.1	242.7	304.8	304.2		282.7
Oct	290.5	282.9	273.5	281.3	290.5	281.0	253.6	301.9	310.1		284.9
Nov	290.7	283.0	284.5	280.5	290.7	281.1	253.5	302.1	310.5		285.0
Dec	289.9	282.9	282.3	280.6	289.7	279.9	252.9	300.5	310.1		284.2

See next page for continuation of table.

TABLE B-60.—*Producer price indexes by stage of processing, 1947-86*—Continued

[1967=100]

Year or month	Intermediate materials, supplies, and components								Crude materials for further processing				
	Total	Foods and feeds[2]	Other	Materials and components		Processed fuels and lubricants	Containers	Supplies	Total	Foodstuffs and feedstuffs	Other		
				For manufacturing	For construction						Total	Fuel	Other
1947	72.4	....	70.0	72.1	66.0	85.5	66.8	77.5	101.2	111.7	....	66.6	90.6
1948	78.3	....	76.1	77.8	73.1	96.9	69.8	81.0	110.9	120.8	....	78.7	100.7
1949	75.2	....	74.2	74.5	73.2	88.2	70.1	76.3	96.0	100.3	....	78.3	91.6
1950	78.6	....	77.7	78.1	77.0	89.9	72.0	78.9	104.6	107.6	....	77.9	104.7
1951	88.1	....	87.0	88.5	84.3	93.9	84.5	88.8	120.1	124.5	....	79.4	120.7
1952	85.5	....	84.3	84.8	83.7	92.8	79.9	88.8	110.3	117.2	....	79.9	104.6
1953	86.0	....	85.3	86.2	85.1	93.4	80.0	84.3	101.9	104.9	....	82.7	100.1
1954	86.5	....	85.7	86.3	85.5	93.3	81.5	86.3	101.0	104.9	....	79.0	98.2
1955	88.1	....	88.3	88.4	88.9	93.3	82.6	84.8	97.1	95.1	....	78.8	103.8
1956	92.0	....	92.6	92.6	93.5	96.2	88.6	87.1	97.6	93.1	....	84.4	107.6
1957	94.1	....	95.0	94.8	94.0	101.9	92.5	88.0	99.8	97.2	....	89.2	106.2
1958	94.3	....	94.8	95.2	94.0	96.0	94.7	90.0	102.0	103.0	....	90.3	102.2
1959	95.6	....	96.4	96.5	96.6	95.6	94.2	91.2	99.4	96.2	....	91.9	105.8
1960	95.6	....	96.8	96.5	95.9	98.2	95.5	90.7	97.0	95.1	....	92.8	101.4
1961	95.0	....	95.5	95.3	94.6	99.4	94.7	91.8	96.5	93.8	....	92.6	102.5
1962	94.9	....	95.3	94.7	94.2	99.0	95.9	93.8	97.5	95.7	....	92.1	102.0
1963	95.2	....	95.0	94.9	94.5	98.1	94.7	95.2	95.4	92.9	....	93.2	100.7
1964	95.5	....	95.6	95.9	95.4	96.0	94.0	94.3	94.5	90.8	....	92.8	102.4
1965	96.8	....	96.9	97.4	96.2	97.4	95.8	95.2	99.3	97.1	....	93.5	104.5
1966	99.2	....	98.9	99.3	98.8	99.2	98.4	99.4	105.7	105.9	....	96.3	106.7
1967	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
1968	102.3	99.4	102.5	102.2	105.0	97.6	102.4	101.0	101.6	101.3	102.2	102.3	102.1
1969	105.8	102.7	106.1	105.8	110.8	98.5	106.3	102.8	108.4	109.3	106.8	106.6	106.9
1970	109.9	109.1	109.9	110.0	112.6	105.0	111.4	108.0	112.3	112.0	112.7	122.6	109.8
1971	114.1	111.7	114.3	112.8	119.7	115.2	116.6	111.0	115.1	114.2	117.0	139.0	110.7
1972	118.7	118.5	118.9	117.0	126.2	118.9	121.9	115.6	127.6	127.5	128.0	148.7	121.9
1973	131.6	168.4	128.1	127.7	136.7	131.5	129.2	140.6	174.0	180.0	162.5	164.5	161.5
1974	162.9	200.2	159.5	162.2	161.6	199.1	152.2	154.5	196.1	189.4	208.9	219.4	205.4
1975	180.0	195.3	178.6	178.7	176.4	233.0	171.4	168.1	196.9	191.8	206.9	271.5	188.3
1976	189.1	185.3	189.4	185.4	188.4	250.1	180.2	179.0	202.7	190.2	228.5	305.3	206.7
1977	201.5	190.5	202.3	195.4	203.4	282.5	188.3	188.7	209.2	192.1	245.0	372.1	212.2
1978	215.6	203.1	216.5	208.7	224.7	295.3	202.8	198.5	234.4	216.2	272.3	426.8	233.1
1979	243.2	226.1	244.4	234.4	247.4	364.8	226.8	218.2	274.3	247.9	330.0	507.6	284.5
1980	280.3	252.6	282.3	265.7	268.3	503.0	254.5	244.5	304.6	259.2	401.0	615.0	346.1
1981	306.0	250.3	310.1	286.1	287.6	595.4	276.1	263.8	329.0	257.4	482.3	751.2	413.7
1982	310.4	239.4	315.7	289.8	293.7	591.7	285.6	272.1	319.5	247.8	473.9	886.1	376.8
1983	312.3	247.9	317.1	293.4	301.8	564.8	286.6	277.1	323.6	252.2	477.4	931.5	372.2
1984	320.0	253.1	325.0	301.8	310.3	566.2	302.3	283.4	330.8	259.5	484.5	931.3	380.5
1985	318.7	232.8	325.0	299.5	315.2	548.9	311.2	284.2	306.1	235.0	459.2	909.6	355.3
1986[1]	307.6	230.2	313.3	296.1	317.5	430.3	315.1	287.3	280.0	230.6	386.8	817.3	286.4
1985: Jan	319.5	240.7	325.4	300.6	313.4	556.3	311.1	283.9	318.9	250.7	466.0	916.6	361.9
Feb	318.7	239.2	324.5	300.5	313.3	546.3	311.8	283.8	318.1	250.0	465.1	930.5	358.2
Mar	318.6	236.7	324.7	300.0	313.5	547.9	313.1	283.8	312.3	242.9	462.0	910.8	358.4
Apr	319.3	235.4	325.5	300.6	314.0	552.3	312.4	283.7	311.0	239.9	464.2	915.0	360.2
May	319.9	232.6	326.4	300.5	315.9	558.0	311.7	283.4	309.1	236.3	466.0	938.8	357.7
June	319.3	232.2	325.7	300.3	317.3	549.1	312.0	283.3	305.6	233.7	460.5	924.8	354.0
July	318.6	231.7	325.0	299.8	316.9	544.0	311.4	283.6	303.9	231.6	459.6	921.6	353.5
Aug	317.9	227.1	324.5	299.1	316.5	539.8	310.3	284.1	295.3	221.0	454.7	904.0	351.2
Sept	317.7	225.4	324.4	298.4	315.6	542.4	309.9	284.5	291.8	215.4	455.4	903.0	352.2
Oct	317.6	228.6	324.1	298.0	315.5	542.6	310.4	285.1	297.8	224.6	455.3	898.6	352.8
Nov	318.1	231.4	324.5	297.7	315.0	550.5	309.8	285.6	304.7	236.6	451.6	880.0	352.0
Dec	318.9	232.7	325.3	297.9	315.7	557.2	310.6	285.7	304.3	236.8	450.0	871.6	351.6
1986: Jan	317.4	232.6	323.6	297.1	316.2	540.8	311.2	286.6	301.0	231.7	450.6	871.9	352.4
Feb	313.5	228.9	319.7	296.5	316.5	500.8	310.9	286.4	289.0	227.2	422.7	855.6	321.8
Mar	309.5	227.8	315.5	296.4	317.0	453.4	312.3	286.8	281.1	224.4	403.9	891.8	290.5
Apr	307.1	227.0	313.0	295.5	318.3	428.5	312.8	287.2	273.7	220.3	389.4	865.4	278.8
May	305.7	229.3	312.4	295.4	318.3	424.2	313.6	287.1	279.4	229.9	386.9	859.5	277.1
June	306.8	229.0	312.5	295.1	317.8	426.7	314.0	287.3	276.9	227.1	384.8	837.4	279.5
July	304.8	230.3	310.4	295.5	317.9	401.1	314.6	287.2	277.7	234.4	370.8	792.3	272.6
Aug[1]	304.5	232.1	309.9	296.0	317.6	395.0	316.2	287.1	276.3	238.1	358.3	783.9	259.8
Sept	306.1	233.3	311.5	296.2	317.9	409.1	317.8	287.9	275.5	231.9	369.6	781.3	273.5
Oct	304.9	229.8	310.4	296.5	317.3	395.1	318.4	287.5	276.7	233.7	369.8	773.2	275.3
Nov	304.9	230.9	310.4	296.5	317.6	393.2	319.6	287.9	278.4	235.9	369.7	766.0	276.7
Dec	305.0	231.7	310.5	296.2	317.0	396.2	319.7	288.3	274.8	232.8	365.1	729.4	278.6

[1] Data have been revised through August 1986 to reflect the availability of late reports and corrections by respondents. All data are subject to revision 4 months after original publication.

[2] Intermediate materials for food manufacturing and feeds.

Source: Department of Labor, Bureau of Labor Statistics.

TABLE B–61.—*Producer price indexes by stage of processing, special groups, 1974–86*

[1967 = 100]

Year or month	Finished goods						Intermediate materials, supplies, and components				Crude materials for further processing			
	Total	Foods	Energy	Excluding foods and energy			Total	Foods and feeds [1]	Energy	Other	Total	Foodstuffs and feedstuffs	Energy	Other
				Total	Capital equipment	Consumer goods excluding foods and energy								
1974	147.5	166.9	215.2	133.3	141.0	129.1	162.9	200.2	188.7	156.7	196.1	189.4	223.0	198.3
1975	163.4	181.0	252.4	148.5	162.5	141.0	180.0	195.3	220.8	174.7	196.9	191.8	266.9	165.0
1976	170.6	180.4	282.3	156.8	173.4	148.1	189.1	185.3	236.8	185.0	202.7	190.2	283.1	191.0
1977	181.7	189.9	326.7	166.3	184.6	156.6	201.5	190.5	267.3	196.1	209.2	192.1	323.5	190.1
1978	195.9	207.2	347.7	178.7	199.2	168.0	215.6	203.1	280.3	210.4	234.4	215.2	362.5	209.2
1979	217.7	226.2	469.9	194.7	216.5	183.3	243.2	226.1	348.6	234.2	274.3	247.9	439.9	253.0
1980	247.0	239.5	701.3	216.4	239.8	204.2	280.3	252.6	484.9	261.8	304.6	259.2	586.1	269.4
1981	269.8	253.6	835.4	235.1	264.3	220.1	306.0	250.3	573.6	283.4	329.0	257.4	783.4	266.0
1982	280.7	259.3	822.9	248.6	279.4	232.6	310.4	239.4	570.8	290.1	319.5	247.8	801.5	238.1
1983	285.2	261.8	783.6	256.1	287.2	239.9	312.3	247.9	543.9	294.8	323.6	252.2	791.1	250.7
1984	291.1	273.3	750.3	262.3	294.0	245.9	320.0	253.1	545.0	303.6	330.8	259.5	785.2	266.1
1985	293.7	271.2	720.9	268.7	300.5	252.1	318.7	232.8	528.3	305.2	306.1	235.0	748.1	249.7
1986 [2]	289.6	278.0	518.5	274.9	306.5	258.4	307.6	230.2	414.5	304.4	280.0	230.6	575.8	245.6
1985: Jan	292.1	273.7	711.7	266.0	297.4	249.6	319.5	240.7	535.7	305.1	318.9	250.7	757.5	254.4
Feb	292.6	275.6	692.0	267.2	299.2	250.5	318.7	239.2	526.0	305.3	318.1	250.0	754.1	255.3
Mar	292.1	273.7	693.2	267.2	299.3	250.5	318.6	236.7	527.5	305.2	312.3	242.9	746.4	255.4
Apr	293.1	272.2	714.9	267.7	299.9	251.1	319.3	235.4	531.5	305.6	311.0	239.9	749.1	257.3
May	294.1	269.5	746.1	268.2	300.3	251.5	319.9	232.6	536.7	305.9	309.1	236.3	760.7	252.3
June	294.0	268.7	741.4	268.6	300.5	252.0	319.3	232.2	528.6	306.0	305.6	233.7	754.5	247.4
July	294.8	271.2	733.8	269.4	300.8	252.9	318.6	231.7	523.8	305.6	303.9	231.6	752.6	247.2
Aug	293.5	268.7	719.9	269.4	301.0	252.9	317.9	227.1	519.8	305.5	295.3	221.0	742.9	245.8
Sept	290.0	265.7	718.2	265.7	296.3	249.6	317.7	225.4	522.3	305.0	291.8	215.4	743.2	246.7
Oct	294.7	268.2	716.5	271.6	303.5	254.9	317.6	228.6	522.2	304.6	297.8	224.6	743.1	246.5
Nov	296.4	271.8	729.5	271.8	303.8	255.0	318.1	231.4	529.3	304.2	304.7	236.6	737.1	244.6
Dec	297.2	275.0	733.8	271.4	303.7	254.6	318.9	232.7	536.2	304.5	304.3	236.8	735.6	242.9
1986: Jan	296.0	275.0	700.9	272.1	303.9	255.5	317.4	232.6	520.0	304.3	301.0	231.7	732.8	245.8
Feb	291.9	272.0	629.3	272.5	304.3	256.0	313.5	228.9	482.0	304.2	289.0	227.2	662.9	246.5
Mar	288.0	271.6	554.1	272.5	304.3	256.0	309.5	227.8	437.0	304.5	281.1	224.4	614.5	247.9
Apr	287.2	271.9	517.2	273.9	305.6	257.3	307.1	227.0	413.3	304.3	273.7	220.3	577.0	249.1
May	288.9	274.8	534.1	274.0	305.7	257.5	306.7	229.3	409.1	304.0	279.4	229.9	570.6	249.3
June	289.3	275.1	536.4	274.3	306.1	257.7	306.8	229.0	411.1	303.8	276.9	227.1	563.9	250.1
July	287.6	280.4	461.6	275.0	306.4	258.7	304.8	230.3	386.6	304.1	277.7	234.4	528.8	250.0
Aug [2]	288.1	284.0	456.2	274.8	306.2	258.4	304.5	232.1	380.7	304.2	276.3	238.1	520.4	235.9
Sept	287.5	282.2	477.2	273.1	304.2	256.9	306.1	233.3	393.8	304.7	275.5	231.9	544.1	239.2
Oct	290.5	282.9	454.9	278.8	310.1	262.4	304.9	229.8	380.5	304.9	276.7	233.7	539.2	242.3
Nov	290.7	283.0	452.9	279.1	310.5	262.7	304.9	230.9	378.7	305.1	278.4	235.9	535.3	244.5
Dec	289.9	282.9	446.8	278.5	310.1	262.0	305.0	231.7	381.3	304.8	274.8	232.8	519.5	246.9

[1] Intermediate materials for food manufacturing and feeds.

[2] Data have been revised through August 1986 to reflect the availability of late reports and corrections by respondents. All data are subject to revision 4 months after original publication.

Source: Department of Labor, Bureau of Labor Statistics.

TABLE B–62.—*Producer price indexes for major commodity groups, 1947–86*

[1967=100]

Year or month	Farm products and processed foods and feeds			Industrial commodities				
	Total	Farm products	Processed foods and feeds	Total	Textile products and apparel	Hides, skins, leather, and related products	Fuels and related products, and power [1]	Chemicals and allied products [1]
1947	94.3	109.4	82.9	70.8	103.6	83.3	76.9	93.7
1948	101.5	117.5	88.7	76.9	108.1	84.2	90.5	95.9
1949	89.6	101.6	80.6	75.3	98.9	79.9	86.2	87.6
1950	93.9	106.7	83.4	78.0	102.7	86.3	87.1	88.9
1951	106.9	124.2	92.7	86.1	114.6	99.1	90.3	101.7
1952	102.7	117.2	91.6	84.1	103.4	80.1	90.1	96.5
1953	96.0	106.2	87.4	84.8	100.8	81.3	92.6	97.7
1954	95.7	104.7	88.9	85.0	98.6	77.6	91.3	98.9
1955	91.2	98.2	85.0	86.9	98.7	77.3	91.2	98.5
1956	90.6	96.9	84.9	90.8	98.7	81.9	94.0	99.1
1957	93.7	99.5	87.4	93.3	98.8	82.0	99.1	101.2
1958	98.1	103.9	91.8	93.6	97.0	82.9	95.3	102.0
1959	93.5	97.5	89.4	95.3	98.4	94.2	95.3	101.6
1960	93.7	97.2	89.5	95.3	99.5	90.8	96.1	101.8
1961	93.7	96.3	91.0	94.8	97.7	91.7	97.2	100.7
1962	94.7	98.0	91.9	94.8	98.6	92.7	96.7	99.1
1963	93.8	96.0	92.5	94.7	98.5	90.0	96.3	97.9
1964	93.2	94.6	92.3	95.2	99.2	90.3	93.7	98.3
1965	97.1	98.7	95.5	96.4	99.8	94.3	95.5	99.0
1966	103.5	105.9	101.2	98.5	100.1	103.4	97.8	99.4
1967	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
1968	102.4	102.5	102.2	102.5	103.7	103.2	98.9	99.8
1969	108.0	109.1	107.3	106.0	106.0	108.9	100.9	99.9
1970	111.7	111.0	112.1	110.0	107.1	110.3	106.2	102.2
1971	113.9	112.9	114.5	114.1	109.0	114.1	115.2	104.1
1972	122.4	125.0	120.8	117.9	113.6	131.3	118.6	104.2
1973	159.1	176.3	148.1	125.9	123.8	143.1	134.3	110.0
1974	177.4	187.7	170.9	153.8	139.1	145.1	208.3	146.8
1975	184.2	186.7	182.6	171.5	137.9	148.5	245.1	181.3
1976	183.1	191.0	178.0	182.4	148.2	167.8	265.6	187.2
1977	188.8	192.5	186.1	195.1	154.0	179.3	302.2	192.8
1978	206.6	212.5	202.6	209.4	159.8	200.0	322.5	198.8
1979	229.8	241.4	222.5	236.5	168.7	252.4	408.1	222.3
1980	244.7	249.4	241.2	274.8	183.5	248.9	574.0	260.3
1981	251.5	254.9	248.7	304.1	199.7	260.9	694.5	287.6
1982	248.9	242.4	251.5	312.3	204.6	262.6	693.2	292.3
1983	253.9	248.2	255.9	315.7	205.1	271.1	664.7	293.0
1984	262.4	255.8	265.0	322.6	210.0	286.3	656.8	300.8
1985	250.5	230.5	260.4	323.8	210.4	286.1	633.6	303.2
1986 [2]	252.0	224.7	265.1	312.1	211.1	296.7	483.5	299.7
1985: Jan	257.6	243.2	264.4	322.9	210.3	283.7	636.8	301.6
Feb	258.0	245.3	263.9	322.2	210.6	283.7	625.3	302.2
Mar	254.6	238.8	262.3	322.5	210.5	282.4	625.3	302.6
Apr	253.1	236.8	260.9	323.8	210.7	284.7	633.9	303.3
May	250.2	230.4	260.0	325.3	210.5	284.2	647.3	303.2
June	249.1	229.4	258.8	324.8	210.2	285.5	640.6	303.7
July	249.6	229.3	259.7	324.4	210.2	284.6	635.4	304.6
Aug	244.0	218.0	257.3	323.7	210.4	286.3	627.6	304.6
Sept	240.9	212.8	255.3	322.3	210.3	287.2	628.6	304.7
Oct	245.1	219.9	257.8	324.2	210.1	288.6	628.0	303.0
Nov	251.0	230.4	261.2	324.7	210.6	290.0	634.7	302.6
Dec	252.6	232.2	262.8	325.1	210.6	292.4	639.6	301.9
1986: Jan	251.5	227.4	263.3	323.8	210.7	293.7	620.3	305.1
Feb	248.3	221.8	261.4	318.9	210.9	294.1	567.0	303.7
Mar	247.3	220.2	260.7	314.0	211.4	293.6	512.1	303.8
Apr	246.2	218.6	259.9	311.6	211.1	295.0	482.4	300.2
May	250.8	227.0	262.3	311.6	211.2	296.5	483.8	298.5
June	249.8	222.6	263.2	311.8	211.1	297.9	484.7	298.4
July	254.2	228.6	266.8	308.5	211.4	297.4	444.3	298.4
Aug [2]	255.5	227.0	269.6	307.9	211.2	297.0	438.4	297.0
Sept	254.6	221.7	269.0	308.8	210.9	297.1	455.3	297.1
Oct	255.4	225.4	268.2	309.3	210.9	297.5	440.1	298.0
Nov	255.2	229.3	267.9	309.8	211.3	299.1	438.2	298.5
Dec	254.6	226.8	268.4	309.3	211.0	301.5	435.9	297.5

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[1] Prices for some items in this grouping are lagged and refer to 1 month earlier than the index month; the lag for refined petroleum items was eliminated beginning with the June 1985 data.

See next page for continuation of table.

Table B–62.—*Producer price indexes for major commodity groups, 1947–86*—Continued

[1967 = 100]

Year or month	Industrial commodities—Continued								
	Rubber and plastic products	Lumber and wood products	Pulp, paper, and allied products	Metals and metal products	Machinery and equipment	Furniture and household durables	Non-metallic mineral products	Transportation equipment: Motor vehicles and equipment [3]	Miscellaneous products
1947	70.5	73.4	72.5	54.9	53.7	77.0	66.3	64.1	73.5
1948	72.8	84.0	75.7	62.5	58.2	81.6	71.6	70.8	76.5
1949	70.5	77.7	72.4	63.0	61.0	82.9	73.5	75.7	78.0
1950	85.9	89.3	74.3	66.3	63.1	84.7	75.4	75.3	79.2
1951	105.4	97.2	88.0	73.8	70.5	91.8	80.1	79.4	83.9
1952	95.5	94.4	85.7	73.9	70.6	90.1	80.1	84.0	83.4
1953	89.1	94.3	85.5	76.3	72.2	91.9	83.3	83.6	85.6
1954	90.4	92.6	85.5	76.9	73.4	92.9	85.1	83.8	86.4
1955	102.4	97.1	87.8	82.1	75.7	93.3	87.5	86.3	86.5
1956	103.8	98.5	93.6	89.2	81.8	95.8	91.3	91.2	87.6
1957	103.4	93.5	95.4	91.0	87.6	98.3	94.8	95.1	90.2
1958	103.3	92.4	96.4	90.4	89.4	99.1	95.8	98.1	92.0
1959	102.9	98.8	97.3	92.3	91.3	99.3	97.0	100.3	92.2
1960	103.1	95.3	98.1	92.4	92.0	99.0	97.2	98.8	93.0
1961	99.2	91.0	95.2	91.9	91.9	98.4	97.6	98.6	93.3
1962	96.3	91.6	96.3	91.2	92.0	97.7	97.6	98.6	93.7
1963	96.8	93.5	95.6	91.3	92.2	97.0	97.1	97.8	94.5
1964	95.5	95.4	95.4	93.8	92.8	97.4	97.3	98.3	95.2
1965	95.9	95.9	96.2	96.4	93.9	96.9	97.5	98.5	95.9
1966	97.8	100.2	98.8	98.8	96.8	98.0	98.4	98.6	97.7
1967	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
1968	103.4	113.3	101.1	102.6	103.2	102.8	103.7	102.8	102.2
1969	105.3	125.3	104.0	108.5	106.5	104.9	107.7	104.8	105.2
1970	108.3	113.6	108.2	116.6	111.4	107.5	112.9	108.7	109.9
1971	109.1	127.3	110.1	118.7	115.5	110.0	122.4	114.9	112.9
1972	109.3	144.3	113.4	123.5	117.9	111.4	126.1	118.0	114.6
1973	112.4	177.2	122.1	132.8	121.7	115.2	130.2	119.2	119.7
1974	136.2	183.6	151.7	171.9	139.4	127.9	153.2	129.2	133.1
1975	150.2	176.9	170.4	185.6	161.4	139.7	174.0	144.6	147.7
1976	159.2	205.6	179.4	195.9	171.0	145.6	186.3	153.8	153.7
1977	167.6	236.3	186.4	209.0	181.7	151.5	200.5	163.7	164.3
1978	174.8	276.0	195.6	227.1	196.1	160.4	222.8	176.0	184.3
1979	194.3	300.4	219.0	259.3	213.9	171.3	248.6	190.5	208.7
1980	217.4	288.9	249.2	286.4	239.8	187.7	283.0	208.8	258.8
1981	232.6	292.8	273.8	300.4	263.3	198.5	309.5	237.6	265.7
1982	241.4	284.7	288.7	301.6	278.8	206.9	320.2	251.3	276.4
1983	243.2	307.1	298.1	307.2	286.4	214.0	325.2	256.8	289.6
1984	246.8	307.4	318.5	316.1	293.1	218.7	337.3	261.5	295.9
1985	245.9	303.6	327.2	314.9	298.9	221.6	347.8	267.3	302.3
1986 [2]	246.1	305.3	335.3	311.3	303.3	223.9	352.0	274.4	308.6
1985: Jan	246.7	304.4	327.1	315.0	297.0	220.3	341.7	265.2	299.2
Feb	246.4	303.4	327.6	315.6	297.6	220.8	342.6	266.7	300.7
Mar	246.5	303.1	327.7	315.4	297.8	221.1	343.9	266.2	300.6
Apr	246.6	301.5	327.6	316.8	298.1	221.7	345.5	266.2	301.6
May	246.4	306.8	327.3	316.4	298.4	221.7	348.1	267.3	301.4
June	246.2	313.1	327.1	314.9	298.9	221.6	349.3	267.5	301.3
July	245.8	310.1	326.8	314.5	299.2	222.0	349.7	267.7	303.5
Aug	244.8	305.5	326.9	314.7	299.6	222.0	350.3	267.7	303.4
Sept	245.1	300.5	326.6	314.4	299.8	221.9	349.9	254.8	303.7
Oct	245.2	299.4	327.2	314.2	299.9	221.8	350.5	273.3	304.2
Nov	245.5	296.9	327.3	313.3	300.1	222.2	350.5	273.2	304.4
Dec	246.0	298.1	327.4	313.4	300.4	222.4	351.1	271.9	304.0
1986: Jan	246.9	298.9	330.6	311.0	301.1	222.7	352.5	270.3	307.3
Feb	247.5	297.1	331.1	311.2	301.6	223.0	352.3	270.8	306.9
Mar	246.7	301.2	331.3	311.2	302.0	223.2	352.4	270.2	307.2
Apr	246.7	308.6	332.8	311.0	302.7	223.6	352.8	272.9	307.3
May	246.3	308.1	333.8	310.6	302.9	224.1	353.6	272.6	307.2
June	246.1	306.0	334.2	310.7	303.1	224.2	353.0	273.0	306.8
July	245.4	306.8	335.2	310.4	303.9	224.1	352.9	273.3	309.4
Aug [2]	246.2	307.2	336.4	311.1	304.1	224.2	351.8	272.0	309.7
Sept	246.3	308.3	337.9	311.8	304.3	223.9	351.1	265.7	310.0
Oct	245.2	307.0	339.5	312.1	304.4	224.4	351.2	284.4	310.4
Nov	244.4	307.6	340.5	312.2	304.9	224.6	350.9	284.2	310.5
~~Dec~~	244.9	306.7	340.6	311.8	305.0	225.0	349.8	282.9	309.9

[2] Data have been revised through August 1986 to reflect the availability of late reports and corrections by respondents. All data are subject to revision 4 months after original publication.

[3] Index for total transportation equipment is not shown but is available beginning December 1968.

Source: Department of Labor, Bureau of Labor Statistics.

TABLE B-63.—*Changes in producer price indexes for finished goods, 1955–86*

[Percent change]

Year or month	Total finished goods		Finished consumer foods		Finished goods excluding consumer foods						Finished energy goods		Finished goods excluding foods and energy	
					Total		Consumer goods		Capital equipment					
	Dec. to Dec.[1]	Year to year	Dec. to Dec.[1]	Year to year	Dec. to Dec.[1]	Year to year	Dec. to Dec.[1]	Year to year	Dec. to Dec.[1]	Year to year	Dec. to Dec.[1]	Year to year	Dec. to Dec.[1]	Year to year
1955	1.2	0.2	−2.9	−2.5	......	......	1.7	0.8	5.6	3.0	......	......	......	......
1956	4.2	2.8	3.6	−.2	......	......	2.5	2.4	8.3	7.4	......	......	......	......
1957	3.2	3.6	5.3	3.5	......	......	1.7	2.5	4.3	6.2	......	......	......	......
1958	.5	2.3	.4	5.8	......	......	.2	.1	1.3	2.6	......	......	......	......
1959	−.4	−.2	−3.7	−4.7	......	......	.8	1.3	1.0	1.9	......	......	......	......
1960	1.8	.8	5.2	2.2	......	......	.4	.4	.1	.2	......	......	......	......
1961	−.5	0	−1.8	−.4	......	......	−.3	−.1	.2	.1	......	......	......	......
1962	.1	.3	.5	.9	......	......	−.1	−.2	.3	.4	......	......	......	......
1963	−.2	−.3	−1.3	−1.2	......	......	.1	0	.5	.2	......	......	......	......
1964	.5	.4	.4	.5	......	......	.1	−.1	.9	1.0	......	......	......	......
1965	3.3	1.7	9.1	3.8	......	......	.9	.7	1.5	1.2	......	......	......	......
1966	2.2	3.2	1.4	6.5	......	......	1.7	1.6	3.9	2.5	......	......	......	......
1967	1.6	1.2	−.4	−1.6	......	......	2.1	1.9	3.1	3.3	......	......	......	......
1968	3.1	2.8	4.8	3.6	2.4	2.6	2.0	2.1	3.0	3.5	......	......	......	......
1969	4.8	3.7	8.2	6.2	3.4	2.7	2.9	2.4	4.6	3.3	......	......	......	......
1970	2.2	3.5	−2.5	3.2	4.3	3.5	3.9	3.0	4.9	4.8	......	......	......	......
1971	3.2	3.1	5.9	1.6	2.1	3.7	2.0	3.4	2.4	4.1	......	......	......	......
1972	3.8	3.1	8.0	5.6	2.1	2.0	2.0	1.9	2.0	2.5	......	......	......	......
1973	11.8	9.1	22.5	20.3	6.6	4.1	7.4	4.5	5.3	3.3	......	......	......	......
1974	18.3	15.3	13.0	14.0	21.2	16.0	20.5	16.9	22.6	14.2	......	......	......	......
1975	6.6	10.8	5.5	8.4	7.2	12.1	6.7	10.5	8.2	15.2	16.4	17.3	6.1	11.4
1976	3.7	4.4	−2.5	−.3	6.2	6.3	6.0	6.2	6.4	6.7	11.5	11.8	5.6	5.6
1977	6.9	6.5	6.9	5.3	6.9	7.0	6.7	7.2	7.3	6.5	12.1	15.7	6.3	6.1
1978	9.2	7.8	11.7	9.1	8.3	7.3	8.5	7.1	7.9	7.9	8.5	6.4	8.3	7.5
1979	12.8	11.1	7.4	9.2	14.8	11.9	17.5	13.3	8.8	8.7	58.0	35.1	9.4	9.0
1980	11.8	13.5	7.5	5.9	13.3	16.2	14.2	18.6	11.4	10.8	27.8	49.2	10.7	11.1
1981	7.1	9.2	1.4	5.9	8.8	10.3	8.5	10.2	9.2	10.2	14.1	19.1	7.8	8.6
1982	3.7	4.0	2.1	2.2	4.1	4.6	4.2	4.1	3.9	5.7	−.1	−1.5	4.9	5.7
1983	.6	1.6	2.3	1.0	.0	1.7	−.8	1.3	1.9	2.8	−9.2	−4.8	1.8	3.0
1984	1.7	2.1	3.5	4.4	1.1	1.4	.8	.9	1.8	2.4	−4.1	−4.2	2.1	2.4
1985	1.8	.9	.5	−.8	2.2	1.4	2.0	1.1	2.7	2.2	−.3	−3.9	2.7	2.4
1986[2]	−2.5	−1.4	2.9	2.5	−4.2	−2.6	−6.9	−4.7	2.1	2.0	−39.1	−28.1	2.6	2.3
	Percent change from preceding month													
	Unadjusted	Seasonally adjusted	Unadjusted	Seasonally adjusted	Unadjusted	Seasonally adjusted	Unadjusted	Seasonally adjusted	Unadjusted	Seasonally adjusted	Unadjusted	Seasonally adjusted	Unadjusted	Seasonally adjusted
1985: Jan	0.0	−0.1	0.0	−0.4	0.1	0.0	−0.2	−0.2	0.6	0.4	−3.3	−2.6	0.6	0.5
Feb	.2	0	.7	−.0	−.0	−.0	−.3	−.2	.6	.6	−2.8	−2.5	.5	.4
Mar	−.2	.0	−.7	−.4	.0	.2	.0	.2	.0	.2	.2	−.9	0	.4
Apr	.3	.5	−.5	−.6	.6	.9	.8	1.2	.2	.1	3.1	6.1	.2	0
May	.3	.2	−1.0	−.8	.8	.6	1.0	.7	.1	.1	4.4	3.0	.2	.1
June	−.0	−.2	−.3	−.1	.0	−.3	0	−.4	.1	.1	−.6	−3.3	.1	.3
July	.3	.2	.9	.9	.1	.0	.1	0	.1	.1	−1.0	−1.1	.3	.3
Aug	−.4	−.3	−.9	−.7	−.3	−.2	−.5	−.3	.1	.2	−1.9	−1.5	0	.1
Sept	−1.2	−.5	−1.1	−1.0	−1.2	−.4	−1.0	−.4	−1.6	−.5	−.2	−.4	−1.4	−.4
Oct	1.6	.9	.9	1.7	1.8	.7	1.6	.6	2.4	1.0	−.2	.1	2.2	.8
Nov	.6	.7	1.3	1.1	.4	.5	.4	.7	.1	.2	1.8	2.3	.1	.2
Dec	.3	.6	1.2	1.0	0	.5	0	.6	−.0	.1	.6	2.3	−.1	.2
1986: Jan	−.4	−.7	0	−.6	−.6	−.8	−.8	−1.0	.1	−.2	−4.5	−4.4	.3	−.1
Feb	−1.4	−1.6	−1.1	−1.7	−1.5	−1.6	−2.2	−2.3	.1	.1	−10.2	−9.9	.1	0
Mar	−1.3	−1.0	−.1	.1	−1.7	−1.3	−2.5	−2.0	0	.2	−11.9	−12.0	0	.5
Apr	−.3	−.5	.1	.1	−.4	−.8	−.2	−1.2	.4	.3	−6.7	−7.8	.5	.3
May	.6	.5	1.1	1.3	.4	.2	.6	.3	.0	.0	3.3	1.8	.0	.0
June	.1	.1	.1	−.0	.1	.2	.1	.1	.1	.2	.4	.1	.1	.1
July	−.6	−.6	1.9	1.8	−1.4	−1.5	−2.1	−2.2	.1	.1	−13.9	−13.9	.3	.2
Aug[2]	.2	.3	1.3	1.6	−.2	−.1	−.3	−.1	−.1	.1	−1.2	−.8	−.1	.0
Sept	−.2	.5	−.6	−.3	−.1	.7	.2	.9	−.7	.4	4.6	4.4	−.6	.3
Oct	1.0	.3	.2	.9	1.4	.1	1.0	−.0	1.9	.5	−4.7	−4.3	2.1	.7
Nov	.1	.2	.0	−.1	.1	.3	.0	.3	.1	.3	−.4	−.0	.1	.3
Dec	−.3	0	−.0	−.4	−.3	.2	−.4	.2	−.1	0	−1.3	.2	−.2	.1

[1] Changes from December to December are based on unadjusted indexes.

[2] Data have been revised through August 1986 to reflect the availability of late reports and corrections by respondents. All data are subject to revision 4 months after original publication.

Source: Department of Labor, Bureau of Labor Statistics.

TABLE B–64.—*Money stock, liquid assets, and debt measures, 1959–86*

[Averages of daily figures; billions of dollars, seasonally adjusted]

Year and month	M1	M2	M3	L	Debt [1]	Percent change from year or 6 months earlier [2]			
	Sum of currency, demand deposits, travelers checks, and other checkable deposits (OCDs)	M1 plus overnight RPs and Eurodollars, MMMF balances (general purpose and broker/dealer), MMDAs, and savings and small time deposits	M2 plus large time deposits, term RPs, term Eurodollars, and institution-only MMMF balances	M3 plus other liquid assets	Debt of domestic nonfinancial sectors (monthly average)	M1	M2	M3	Debt
December:									
1959	141.0	297.8	299.8	388.6	673.0	....	....	....	8.0
1960	141.8	312.3	315.3	403.6	708.2	0.6	4.9	5.2	5.2
1961	146.5	335.5	341.0	430.8	750.4	3.3	7.4	8.2	6.0
1962	149.2	362.7	371.4	466.1	802.8	1.8	8.1	8.9	7.0
1963	154.7	393.2	406.0	503.8	858.5	3.7	8.4	9.3	6.9
1964	161.9	424.8	442.5	540.4	921.6	4.7	8.0	9.0	7.4
1965	169.5	459.4	482.2	584.4	990.8	4.7	8.1	9.0	7.5
1966	173.7	480.0	505.1	614.8	1,058.2	2.5	4.5	4.7	6.8
1967	185.1	524.3	557.1	666.5	1,134.8	6.6	9.2	10.3	7.2
1968	199.4	566.3	606.2	728.9	1,230.1	7.7	8.0	8.8	8.4
1969	205.8	589.5	615.0	763.5	1,320.0	3.2	4.1	1.5	7.3
1970	216.6	628.2	677.5	816.3	1,410.6	5.2	6.6	10.2	6.9
1971	230.8	712.7	776.2	903.1	1,544.2	6.6	13.5	14.6	9.5
1972	252.0	805.1	886.0	1,023.0	1,700.5	9.2	13.0	14.1	10.1
1973	265.9	861.0	985.0	1,141.7	1,889.5	5.5	6.9	11.2	11.1
1974	277.5	908.4	1,070.4	1,249.2	2,062.7	4.4	5.5	8.7	9.2
1975	291.1	1,023.1	1,172.2	1,366.6	2,245.6	4.9	12.6	9.5	8.9
1976	310.4	1,163.6	1,311.8	1,515.9	2,485.8	6.6	13.7	11.9	10.7
1977	335.3	1,286.6	1,472.6	1,704.1	2,800.2	8.0	10.6	12.3	12.6
1978	363.0	1,388.9	1,646.4	1,909.0	3,173.1	8.3	8.0	11.8	13.3
1979	388.7	1,497.5	1,803.2	2,114.8	3,556.1	7.1	7.8	9.5	12.1
1980	414.2	1,630.3	1,987.4	2,323.3	3,898.9	6.6	8.9	10.2	9.6
1981	441.1	1,792.8	2,233.6	2,593.7	4,279.2	6.5	10.0	12.4	9.8
1982	479.9	1,952.6	2,443.5	2,850.1	4,661.7	8.8	8.9	9.4	8.9
1983	527.1	2,186.0	2,697.3	3,162.7	5,210.1	9.8	12.0	10.4	11.8
1984	558.5	2,373.8	2,986.6	3,532.4	5,949.8	6.0	8.6	10.7	14.2
1985	626.6	2,566.5	3,201.2	3,839.5	6,778.6	12.2	8.1	7.2	13.9
1986 [p]	730.4	2,804.7	3,488.1	....	....	16.6	9.3	9.0	....
1986: Jan	627.2	2,569.9	3,224.5	3,862.2	6,878.5	10.7	6.0	7.3	16.0
Feb	631.0	2,577.7	3,241.5	3,881.3	6,923.3	8.9	5.0	7.2	15.2
Mar	638.4	2,592.4	3,262.6	3,895.1	6,968.5	9.0	5.0	7.2	14.7
Apr	646.1	2,622.2	3,293.7	3,918.6	7,029.1	10.7	6.7	8.2	14.6
May	658.7	2,649.7	3,315.4	3,951.0	7,101.3	12.8	7.9	8.6	14.0
June	666.8	2,670.8	3,339.0	3,973.5	7,172.2	13.2	8.3	8.8	12.0
July	676.0	2,699.2	3,375.1	4,003.5	7,238.1	16.2	10.3	9.6	10.7
Aug	687.6	2,724.3	3,400.7	4,031.1	7,314.8	18.7	11.7	10.1	11.6
Sept	693.2	2,740.8	3,425.5	4,059.3	7,387.2	17.9	11.8	10.2	12.4
Oct	701.2	2,765.2	3,444.2	4,082.0	7,444.4	17.8	11.2	9.3	12.2
Nov [p]	713.5	2,781.4	3,461.2	4,111.8	7,519.3	17.3	10.2	9.0	12.1
Dec [p]	730.4	2,804.7	3,488.1	....	....	20.0	10.3	9.1	....

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[1] Consists of outstanding credit market debt of the U.S. Government, State and local government and private nonfinancial sectors; data from flow of funds accounts.

[2] Annual changes are from December to December, and monthly changes are from 6 months earlier at an annual rate.

Note.—The nontransactions portion of M2 is seasonally adjusted as a whole to reduce distortions caused by substantial portfolio shifts arising from regulatory and financial changes in recent years, especially shifts to MMDAs in 1983. A similar procedure is used to seasonally adjust the remaining nontransactions balances in M3. See Table B-65 for components.

Source: Board of Governors of the Federal Reserve System.

TABLE B–65.—*Components of money stock measures and liquid assets, 1959–86*

[Averages of daily figures; billions of dollars, seasonally adjusted, except as noted]

Year and month	Currency	Travelers checks	Demand deposits	Other checkable deposits (OCDs)	Overnight repurchase agreements (RPs) net, plus overnight Eurodollars NSA	Money market mutual fund (MMMF) balances		Money market deposit accounts (MMDAs) NSA	Savings deposits
						General purpose and broker/dealer NSA	Institution only NSA		
December:									
1959	29.0	0.4	111.6	0.0	0.0	0.0	0.0	0.0	146.4
1960	28.9	.4	112.5	.0	.0	.0	.0	.0	159.1
1961	29.5	.4	116.5	.0	.0	.0	.0	.0	175.5
1962	30.6	.4	118.2	.0	.0	.0	.0	.0	194.8
1963	32.5	.5	121.7	.1	.0	.0	.0	.0	214.4
1964	34.3	.5	127.0	.1	.0	.0	.0	.0	235.2
1965	36.3	.6	132.5	.1	.0	.0	.0	.0	256.9
1966	38.3	.6	134.6	.1	.0	.0	.0	.0	253.1
1967	40.4	.7	143.9	.1	.0	.0	.0	.0	263.7
1968	43.4	.8	155.1	.1	.0	.0	.0	.0	268.9
1969	46.1	.8	158.8	.1	2.2	.0	.0	.0	263.7
1970	49.2	1.0	166.3	.1	1.3	.0	.0	.0	261.0
1971	52.6	1.1	176.9	.2	2.3	.0	.0	.0	292.2
1972	56.8	1.3	193.7	.2	2.8	.0	.0	.0	321.4
1973	61.6	1.5	202.4	.3	5.3	.1	.0	.0	326.7
1974	67.9	1.8	207.4	.4	5.6	1.7	.2	.0	338.5
1975	73.8	2.3	214.1	.9	5.8	2.7	.4	.0	388.8
1976	80.6	2.8	224.3	2.7	10.6	2.4	.6	.0	453.1
1977	88.6	3.1	239.4	4.2	14.7	2.4	.9	.0	492.2
1978	97.6	3.5	253.5	8.5	20.3	6.4	3.1	.0	482.0
1979	106.4	3.8	261.1	17.4	21.2	33.4	9.5	.0	423.9
1980	116.7	4.2	265.3	28.0	28.3	61.6	15.2	.0	401.4
1981	124.1	4.4	234.6	78.0	35.9	150.6	38.0	.0	344.8
1982	134.3	4.3	237.9	103.4	38.8	185.2	51.1	43.2	357.9
1983	148.3	4.9	242.7	131.3	53.8	138.2	43.2	379.2	306.6
1984	158.5	5.2	248.4	146.3	56.3	167.5	62.7	417.0	289.7
1985	170.6	5.9	271.5	178.6	70.3	176.5	64.6	512.0	303.6
1986[p]	183.5	6.4	307.8	232.7	75.7	207.2	84.1	570.7	371.5
1985: Jan	159.6	5.3	249.0	149.0	60.4	171.9	65.0	435.7	289.4
Feb	160.7	5.3	251.2	152.2	64.6	175.1	62.2	450.5	289.9
Mar	161.3	5.4	251.4	154.1	63.3	177.6	59.5	460.2	289.7
Apr	161.9	5.5	251.8	156.5	57.8	176.2	59.6	462.5	289.0
May	163.2	5.5	255.4	158.4	61.3	172.2	63.5	466.4	290.8
June	164.4	5.7	259.0	161.8	60.8	175.4	67.1	478.1	293.6
July	165.3	5.8	260.4	164.8	60.8	175.8	65.0	487.2	296.7
Aug	166.9	5.9	263.1	169.0	63.8	176.8	63.6	495.2	299.7
Sept	167.7	5.9	266.4	171.5	64.5	176.7	62.3	499.8	300.3
Oct	168.7	5.9	266.0	173.7	65.2	177.0	63.3	504.1	302.3
Nov	169.8	5.9	267.8	176.7	66.4	176.8	64.5	509.5	303.7
Dec	170.6	5.9	271.5	178.6	70.3	176.5	64.6	512.0	303.6
1986: Jan	171.9	5.9	268.9	180.5	68.9	177.7	67.3	515.7	304.0
Feb	172.9	5.9	269.2	183.1	68.5	181.0	67.7	516.3	304.9
Mar	173.9	6.1	273.2	185.3	67.6	186.2	70.2	520.5	306.9
Apr	174.4	6.1	275.7	189.9	68.6	191.4	74.1	525.2	311.4
May	175.8	6.1	281.6	195.1	69.2	193.2	76.1	530.8	318.5
June	176.7	6.2	284.9	199.0	66.5	197.3	75.0	540.4	325.0
July	177.5	6.4	288.3	203.8	71.9	199.7	77.5	546.1	331.2
Aug	179.0	6.5	291.8	210.4	74.6	200.5	80.8	553.1	337.6
Sept	179.7	6.5	292.2	214.8	72.7	202.2	84.4	558.3	344.4
Oct	181.2	6.4	293.2	220.4	77.2	206.9	84.5	563.8	353.8
Nov[p]	182.2	6.4	298.4	226.4	75.8	207.0	84.4	568.1	363.3
Dec[p]	183.5	6.4	307.8	232.7	75.7	207.2	84.1	570.7	371.5

See next page for continuation of table.

TABLE B-65.—*Components of money stock measures and liquid assets, 1959–86*—Continued

[Averages of daily figures; billions of dollars, seasonally adjusted, except as noted]

Year and month	Small denomination time deposits [1]	Large denomination time deposits [1]	Term repurchase agreements (RPs) NSA	Term Eurodollars NSA	Savings bonds	Short-term Treasury securities	Bankers acceptances	Commercial paper
December:								
1959	11.4	1.2	0.0	0.7	46.1	38.6	0.6	3.6
1960	12.5	2.0	.0	.8	45.7	36.7	.9	5.1
1961	14.8	3.9	.0	1.4	46.5	37.0	1.1	5.2
1962	20.1	7.0	.0	1.6	46.9	39.8	1.1	6.8
1963	25.5	10.8	.0	1.9	48.1	40.7	1.2	7.7
1964	29.2	15.2	.0	2.4	49.0	38.5	1.3	9.1
1965	34.5	21.2	.0	1.7	49.6	40.7	1.6	10.2
1966	55.0	23.1	.0	2.1	50.2	43.2	1.8	14.4
1967	77.8	30.9	0	2.1	51.2	38.7	1.8	17.8
1968	100.5	37.4	.0	2.9	51.8	46.1	2.3	22.5
1969	120.4	20.4	2.6	2.7	51.7	59.5	3.3	34.0
1970	151.1	45.2	1.6	2.2	52.0	48.9	3.5	34.5
1971	189.7	57.7	2.7	2.7	54.3	36.1	3.8	32.7
1972	231.6	73.3	3.5	3.6	57.6	40.7	3.5	35.2
1973	265.8	111.1	6.8	5.4	60.4	49.4	5.0	41.9
1974	287.9	144.8	7.9	8.0	63.3	52.9	12.6	50.1
1975	337.9	129.7	8.2	9.7	67.2	68.5	10.7	48.0
1976	390.8	118.1	14.0	14.8	71.8	69.8	10.8	51.7
1977	445.7	145.0	19.1	20.2	76.4	78.2	14.1	62.9
1978	521.5	195.1	26.6	31.8	80.3	81.1	22.0	79.2
1979	635.3	222.1	29.5	44.7	79.6	107.8	27.2	97.0
1980	730.2	259.0	34.0	50.3	72.3	133.4	32.1	98.1
1981	825.1	301.8	36.0	67.5	67.8	149.6	39.9	102.8
1982	852.8	327.8	34.5	81.7	68.0	184.4	44.3	109.9
1983	785.2	329.9	51.8	91.5	71.2	214.1	44.5	135.6
1984	887.5	413.9	62.2	83.1	74.3	266.1	43.6	161.8
1985	880.3	436.5	66.0	76.7	79.5	308.4	41.1	209.5
1986 ᵖ	852.4	444.3	81.1	83.0	......	......	......	......
1985: Jan	887.4	415.6	58.9	81.1	74.5	266.9	43.3	159.5
Feb	885.2	416.9	58.5	81.3	74.9	270.5	45.0	164.5
Mar	885.0	421.0	58.6	84.7	75.3	275.0	47.0	169.0
Apr	887.6	425.9	59.7	80.9	75.7	276.3	47.5	167.7
May	889.5	425.0	57.7	80.8	76.1	277.6	46.3	168.6
June	890.3	422.7	57.1	78.2	76.5	282.8	44.5	165.7
July	888.0	418.2	55.8	77.6	76.7	280.1	43.7	171.6
Aug	880.9	421.0	57.3	78.8	77.2	278.3	43.6	182.9
Sept	878.3	425.7	58.7	78.9	78.0	281.6	43.2	187.2
Oct	875.7	429.8	59.7	78.2	78.5	282.1	43.9	192.5
Nov	876.0	432.9	63.3	78.4	79.0	300.7	43.1	196.4
Dec	880.3	436.5	66.0	76.7	79.5	308.4	41.1	209.5
1986: Jan	885.9	447.9	68.8	76.0	79.9	305.6	41.6	210.6
Feb	891.0	451.3	70.6	79.2	80.5	307.8	42.4	209.2
Mar	894.7	450.5	71.6	82.7	81.1	300.3	41.7	209.5
Apr	895.9	452.1	71.5	81.5	81.8	299.1	41.0	203.0
May	891.2	446.4	74.2	79.8	82.6	306.2	40.1	206.7
June	885.6	445.1	75.3	80.1	83.4	300.2	40.3	210.6
July	883.7	445.9	75.0	78.6	84.3	292.5	39.4	212.3
Aug	877.2	448.1	75.5	78.4	85.3	288.6	37.3	219.3
Sept	871.3	447.2	78.0	81.6	86.4	289.4	36.7	221.1
Oct	861.8	443.0	77.8	78.7	87.8	287.5	38.1	224.4
Nov ᵖ	854.9	442.9	81.8	79.9	89.9	298.6	37.7	224.4
Dec ᵖ	852.4	444.3	81.1	83.0	......	......	......	......

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[1] Small denomination and large denomination deposits are those issued in amounts of less than $100,000 and more than $100,000, respectively.

Note.—NSA indicates data are not seasonally adjusted.
See also Table B-64.

Source: Board of Governors of the Federal Reserve System.

TABLE B-66.—*Aggregate reserves of depository institutions and monetary base, 1959–86*

[Averages of daily figures; millions of dollars; seasonally adjusted, except as noted]

Year and month	Adjusted for changes in reserve requirements [1]					Borrowings of depository institutions from the Federal Reserve, NSA		
	Reserves of depository institutions				Monetary base			
	Total	Nonborrowed	Nonborrowed plus extended credit	Required		Total	Seasonal	Extended credit
December:								
1959	13,654	12,713	12,713	13,148	43,383	941	.....	.....
1960	13,823	13,749	13,749	13,080	43,364	74	.....	.....
1961	14,252	14,119	14,119	13,668	44,392	133	.....	.....
1962	14,516	14,256	14,256	13,944	45,639	260	.....	.....
1963	14,816	14,483	14,483	14,325	47,890	332	.....	.....
1964	15,295	15,031	15,031	14,889	50,240	264	.....	.....
1965	15,840	15,397	15,397	15,417	52,916	444	.....	.....
1966	15,835	15,303	15,303	15,496	54,992	532	.....	.....
1967	17,237	17,010	17,010	16,862	58,406	228	.....	.....
1968	18,136	17,390	17,390	17,710	62,485	746	.....	.....
1969	18,421	17,302	17,302	18,135	65,625	1,119	.....	.....
1970	19,309	18,977	18,977	19,060	69,634	332	.....	.....
1971	20,547	20,421	20,421	20,365	74,327	126	.....	.....
1972	22,614	21,565	21,565	22,331	80,867	1,050	.....	.....
1973	23,624	22,326	22,326	23,321	87,384	1,298	41	.....
1974	24,858	24,130	24,277	24,599	94,578	727	32	147
1975	24,996	24,866	24,878	24,730	100,717	130	14	12
1976	25,544	25,491	25,491	25,270	108,288	53	13	.....
1977	26,574	26,005	26,005	26,385	117,401	569	55	.....
1978	27,854	26,986	26,986	27,622	127,981	868	135	.....
1979	29,146	27,673	27,673	28,704	138,950	1,473	81	.....
1980	30,990	29,300	29,303	30,476	150,280	1,690	116	3
1981	32,187	31,551	31,699	31,868	158,116	636	54	148
1982	34,413	33,779	33,965	33,913	170,152	634	33	186
1983	36,155	35,381	35,383	35,594	185,384	774	96	2
1984	39,509	36,323	38,927	38,657	199,173	3,186	113	2,604
1985	45,612	44,294	44,793	44,554	216,721	1,318	56	499
1986 [p]	55,647	54,821	55,124	54,270	238,801	827	38	303
1985: Jan	40,132	38,738	39,788	39,386	200,776	1,395	62	1,050
Feb	40,946	39,657	40,461	40,044	202,496	1,289	71	803
Mar	40,984	39,391	40,450	40,219	203,337	1,593	88	1,059
Apr	41,148	39,825	40,693	40,410	203,972	1,323	135	868
May	41,855	40,521	41,055	41,051	205,853	1,334	165	534
June	42,669	41,464	42,129	41,764	207,932	1,205	151	665
July	43,083	41,976	42,483	42,227	209,105	1,107	167	507
Aug	43,654	42,581	43,151	42,826	211,208	1,073	221	570
Sept	43,882	42,593	43,249	43,216	212,289	1,289	203	656
Oct	44,244	43,056	43,685	43,491	213,566	1,187	172	629
Nov	44,847	43,106	43,637	43,919	215,253	1,741	107	530
Dec	45,612	44,294	44,793	44,554	216,721	1,318	56	499
1986: Jan	45,881	45,111	45,608	44,771	218,404	770	36	497
Feb	46,370	45,486	45,978	45,272	219,788	884	56	492
Mar	46,865	46,104	46,622	45,968	221,262	761	68	518
Apr	47,275	46,383	47,017	46,474	222,359	893	73	634
May	48,577	47,701	48,285	47,739	224,904	876	94	584
June	49,445	48,642	49,172	48,514	226,631	803	108	531
July	50,489	49,748	50,126	49,579	228,300	741	116	378
Aug	51,318	50,446	50,911	50,579	230,587	872	144	465
Sept	51,809	50,801	51,371	51,083	231,634	1,008	137	570
Oct	52,401	51,559	52,056	51,655	233,439	841	99	497
Nov	53,823	53,071	53,489	52,845	235,921	752	70	418
Dec [p]	55,647	54,821	55,124	54,270	238,801	827	38	303

[1] Aggregate reserves incorporate adjustments for discontinuities associated with the implementation of the Monetary Control Act and other regulatory changes to reserve requirements. For details on aggregate reserves series see Federal Reserve *Bulletin*.

Source: Board of Governors of the Federal Reserve System.

TABLE B–67.—*Commercial bank loans and securities, 1972–86*

[Monthly average, billions of dollars, seasonally adjusted [1]]

Year and month	Total loans and securities	Loans and leases		U.S. Government securities	Other securities
		Total	Commercial and industrial loans		
December:					
1972	572.5	390.1	137.1	89.0	93.4
1973	647.9	460.3	165.0	88.2	99.4
1974	713.9	520.0	196.6	86.3	107.5
1975	745.3	517.3	189.3	116.7	111.2
1976	804.9	555.1	190.9	136.3	113.5
1977	891.9	632.6	211.0	136.6	122.7
1978	1,014.4	747.5	246.2	137.6	129.3
1979	1,136.2	849.9	291.3	144.4	142.0
1980	1,240.5	915.4	327.4	170.6	154.5
1981	1,308.2	968.4	355.9	179.2	160.6
1982	1,401.1	1,033.9	392.5	201.9	165.3
1983	1,553.5	1,123.7	414.0	259.7	170.1
1984	1,722.6	1,319.7	472.9	260.9	142.1
1985	1,900.4	1,449.7	499.5	273.1	177.6
1986 [p]	2,079.7	1,576.9	536.7	309.4	193.4
1985: Jan	1,736.1	1,329.2	474.5	262.8	144.2
Feb	1,751.1	1,340.5	478.4	267.9	142.7
Mar	1,763.8	1,355.1	483.2	268.1	140.6
Apr	1,773.6	1,365.7	483.9	265.4	142.5
May	1,792.5	1,377.6	486.1	270.2	144.7
June	1,808.5	1,388.2	487.6	273.1	147.2
July	1,822.2	1,398.2	488.5	275.4	148.5
Aug	1,833.9	1,408.0	489.7	275.1	150.7
Sept	1,847.2	1,418.0	492.1	275.5	153.6
Oct	1,855.5	1,424.0	492.7	274.2	157.3
Nov	1,876.0	1,436.8	495.7	276.0	163.3
Dec	1,900.4	1,449.7	499.5	273.1	177.6
1986: Jan	1,930.0	1,469.3	502.1	268.2	192.5
Feb	1,935.5	1,473.7	502.4	273.6	188.1
Mar	1,944.6	1,491.8	506.1	269.5	183.3
Apr	1,947.9	1,495.8	507.8	270.0	182.1
May	1,957.5	1,501.5	506.7	274.1	181.9
June	1,963.7	1,505.3	508.7	274.8	183.6
July	1,985.0	1,513.4	508.7	285.4	186.1
Aug	2,007.7	1,524.5	510.4	290.9	192.3
Sept	2,029.6	1,534.7	512.1	294.3	200.7
Oct	2,034.0	1,537.7	514.1	299.6	196.7
Nov	2,049.0	1,549.5	520.3	304.8	194.8
Dec [p]	2,079.7	1,576.9	536.7	309.4	193.4

[1] Data are prorated averages of Wednesday figures for domestically chartered banks and averages of current and previous month-end data for foreign-related institutions. Lease financing receivables are included in total loans and investments and in total loans.

Note.—Data are not strictly comparable because of breaks in the series.

Source: Board of Governors of the Federal Reserve System.

TABLE B–68.—*Bond yields and interest rates, 1929–86*

[Percent per annum]

Year and month	U.S. Treasury securities				Corporate bonds (Moody's)		High-grade municipal bonds (Standard & Poor's)	New-home mortgage yields (FHLBB) [4]	Commercial paper, 6 months [5]	Prime rate charged by banks [6]	Discount rate, Federal Reserve Bank of New York [6]	Federal funds rate [7]
	Bills (new issues) [1]		Constant maturities [2]									
	3-month	6-month	3-year	10-year	Aaa [3]	Baa						
1929	....	....	....	....	4.73	5.90	4.27	....	5.85	5.50–6.00	5.16	....
1933	0.515	....	....	....	4.49	7.76	4.71	....	1.73	1.50–4.00	2.56	....
1939	.023	....	....	....	3.01	4.96	2.76	....	.59	1.50	1.00	....
1940	.014	....	....	....	2.84	4.75	2.50	....	.56	1.50	1.00	....
1941	.103	....	....	....	2.77	4.33	2.10	....	.53	1.50	1.00	....
1942	.326	....	....	....	2.83	4.28	2.36	....	.66	1.50	[8] 1.00	....
1943	.373	....	....	....	2.73	3.91	2.06	....	.69	1.50	[8] 1.00	....
1944	.375	....	....	....	2.72	3.61	1.86	....	.73	1.50	[8] 1.00	....
1945	.375	....	....	....	2.62	3.29	1.67	....	.75	1.50	[8] 1.00	....
1946	.375	....	....	....	2.53	3.05	1.64	....	.81	1.50	[8] 1.00	....
1947	.594	....	....	....	2.61	3.24	2.01	....	1.03	1.50–1.75	1.00	....
1948	1.040	....	....	....	2.82	3.47	2.40	....	1.44	1.75–2.00	1.34	....
1949	1.102	....	....	....	2.66	3.42	2.21	....	1.49	2.00	1.50	....
1950	1.218	....	....	....	2.62	3.24	1.98	....	1.45	2.07	1.59	....
1951	1.552	....	....	....	2.86	3.41	2.00	....	2.16	2.56	1.75	....
1952	1.766	....	....	....	2.96	3.52	2.19	....	2.33	3.00	1.75	....
1953	1.931	....	2.47	2.85	3.20	3.74	2.72	....	2.52	3.17	1.99	....
1954	.953	....	1.63	2.40	2.90	3.51	2.37	....	1.58	3.05	1.60	....
1955	1.753	....	2.47	2.82	3.06	3.53	2.53	....	2.18	3.16	1.89	1.78
1956	2.658	....	3.19	3.18	3.36	3.88	2.93	....	3.31	3.77	2.77	2.73
1957	3.267	....	3.98	3.65	3.89	4.71	3.60	....	3.81	4.20	3.12	3.11
1958	1.839	....	2.84	3.32	3.79	4.73	3.56	....	2.46	3.83	2.15	1.57
1959	3.405	3.832	4.46	4.33	4.38	5.05	3.95	....	3.97	4.48	3.36	3.30
1960	2.928	3.247	3.98	4.12	4.41	5.19	3.73	....	3.85	4.82	3.53	3.22
1961	2.378	2.605	3.54	3.88	4.35	5.08	3.46	....	2.97	4.50	3.00	1.96
1962	2.778	2.908	3.47	3.95	4.33	5.02	3.18	....	3.26	4.50	3.00	2.68
1963	3.157	3.253	3.67	4.00	4.26	4.86	3.23	5.89	3.55	4.50	3.23	3.18
1964	3.549	3.686	4.03	4.19	4.40	4.83	3.22	5.82	3.97	4.50	3.55	3.50
1965	3.954	4.055	4.22	4.28	4.49	4.87	3.27	5.81	4.38	4.54	4.04	4.07
1966	4.881	5.082	5.23	4.92	5.13	5.67	3.82	6.25	5.55	5.63	4.50	5.11
1967	4.321	4.630	5.03	5.07	5.51	6.23	3.98	6.46	5.10	5.61	4.19	4.22
1968	5.339	5.470	5.68	5.65	6.18	6.94	4.51	6.97	5.90	6.30	5.16	5.66
1969	6.677	6.853	7.02	6.67	7.03	7.81	5.81	7.80	7.83	7.96	5.87	8.20
1970	6.458	6.562	7.29	7.35	8.04	9.11	6.51	8.45	7.71	7.91	5.95	7.18
1971	4.348	4.511	5.65	6.16	7.39	8.56	5.70	7.74	5.11	5.72	4.88	4.66
1972	4.071	4.466	5.72	6.21	7.21	8.16	5.27	7.60	4.73	5.25	4.50	4.43
1973	7.041	7.178	6.95	6.84	7.44	8.24	5.18	7.96	8.15	8.03	6.44	8.73
1974	7.886	7.926	7.82	7.56	8.57	9.50	6.09	8.92	9.84	10.81	7.83	10.50
1975	5.838	6.122	7.49	7.99	8.83	10.61	6.89	9.00	6.32	7.86	6.25	5.82
1976	4.989	5.266	6.77	7.61	8.43	9.75	6.49	9.00	5.34	6.84	5.50	5.04
1977	5.265	5.510	6.69	7.42	8.02	8.97	5.56	9.02	5.61	6.83	5.46	5.54
1978	7.221	7.572	8.29	8.41	8.73	9.49	5.90	9.56	7.99	9.06	7.46	7.93
1979	10.041	10.017	9.71	9.44	9.63	10.69	6.39	10.78	10.91	12.67	10.28	11.19
1980	11.506	11.374	11.55	11.46	11.94	13.67	8.51	12.66	12.29	15.27	11.77	13.36
1981	14.029	13.776	14.44	13.91	14.17	16.04	11.23	14.70	14.76	18.87	13.42	16.38
1982	10.686	11.084	12.92	13.00	13.79	16.11	11.57	15.14	11.89	14.86	11.02	12.26
1983	8.63	8.75	10.45	11.10	12.04	13.55	9.47	12.57	8.89	10.79	8.50	9.09
1984	9.58	9.80	11.89	12.44	12.71	14.19	10.15	12.38	10.16	12.04	8.80	10.23
1985	7.48	7.66	9.64	10.62	11.37	12.72	9.18	11.55	8.01	9.93	7.69	8.10
1986	5.98	6.03	7.06	7.68	9.02	10.39	7.38	10.17	6.39	8.33	6.33	6.81
										High-low	High-low	
1981:												
Jan	14.724	13.883	13.01	12.57	12.81	15.03	9.65	13.26	15.10	21.50–20.00	13.00–13.00	19.08
Feb	14.905	14.134	13.65	13.19	13.35	15.37	10.03	13.54	14.87	20.00–19.00	13.00–13.00	15.93
Mar	13.478	12.983	13.51	13.12	13.33	15.34	10.12	14.02	13.59	19.00–17.50	13.00–13.00	14.70
Apr	13.635	13.434	14.09	13.68	13.88	15.56	10.55	14.15	14.17	18.00–17.00	13.00–13.00	15.72
May	16.295	15.334	15.08	14.10	14.32	15.95	10.73	14.10	16.66	20.50–18.00	14.00–13.00	18.52
June	14.557	13.947	14.29	13.47	13.75	15.80	10.56	14.67	15.22	20.50–20.00	14.00–14.00	19.10
July	14.699	14.402	15.15	14.28	14.38	16.17	11.03	14.72	16.09	20.50–20.00	14.00–14.00	19.04
Aug	15.612	15.548	16.00	14.94	14.89	16.34	12.13	15.27	16.62	20.50–20.50	14.00–14.00	17.82
Sept	14.951	15.057	16.22	15.32	15.49	16.92	12.86	15.29	15.93	20.50–19.50	14.00–14.00	15.87
Oct	13.873	14.013	15.50	15.15	15.40	17.11	12.67	15.65	14.72	19.50–18.00	14.00–14.00	15.08
Nov	11.269	11.530	13.11	13.39	14.22	16.39	11.71	16.38	11.96	18.00–16.00	14.00–13.00	13.31
Dec	10.926	11.471	13.66	13.72	14.23	16.55	12.77	15.87	12.14	15.75–15.75	13.00–12.00	12.37

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[1] Rate on new issues within period; bank-discount basis.

[2] Yields on the more actively traded issues adjusted to constant maturities by the Treasury Department.

[3] Series excludes public utility issues for January 17, 1984 through October 11, 1984 due to lack of appropriate issues.

[4] Effective rate (in the primary market) on conventional mortgages, reflecting fees and charges as well as contract rate and assuming, on the average, repayment at end of 10 years. Rates beginning January 1973 not strictly comparable with prior rates.

See next page for continuation of table.

TABLE B–68.—*Bond yields and interest rates, 1929–86*—Continued

[Percent per annum]

Year and month	U.S. Treasury securities				Corporate bonds (Moody's)		High-grade municipal bonds (Standard & Poor's)	New-home mortgage yields (FHLBB) [4]	Commercial paper, 6 months [5]	Prime rate charged by banks [6]	Discount rate, Federal Reserve Bank of New York [8]	Federal funds rate [7]
	Bills (new issues) [1]		Constant maturities [2]									
	3-month	6-month	3-year	10-year	Aaa [3]	Baa						
										High-low	High-low	
1982:												
Jan	12.412	12.930	14.64	14.59	15.18	17.10	13.16	15.25	13.35	15.75–15.75	12.00–12.00	13.22
Feb	13.780	13.709	14.73	14.43	15.27	17.18	12.81	15.12	14.27	17.00–15.75	12.00–12.00	14.78
Mar	12.493	12.621	14.13	13.86	14.58	16.82	12.72	15.67	13.47	16.50–16.50	12.00–12.00	14.68
Apr	12.821	12.861	14.18	13.87	14.46	16.78	12.45	15.84	13.64	16.50–16.50	12.00–12.00	14.94
May	12.148	12.220	13.77	13.62	14.26	16.64	11.99	15.89	13.02	16.50–16.50	12.00–12.00	14.45
June	12.108	12.310	14.48	14.30	14.81	16.92	12.42	15.40	13.79	16.50–16.50	12.00–12.00	14.15
July	11.914	12.236	14.00	13.95	14.61	16.80	12.11	15.70	13.00	16.50–15.50	12.00–11.50	12.59
Aug	9.006	10.105	12.62	13.06	13.71	16.32	11.12	15.68	10.80	15.50–13.50	11.50–10.00	10.12
Sept	8.196	9.539	12.03	12.34	12.94	15.63	10.61	14.98	10.86	13.50–13.50	10.00–10.00	10.31
Oct	7.750	8.299	10.62	10.91	12.12	14.73	9.59	14.41	9.21	13.50–12.00	10.00– 9.50	9.71
Nov	8.042	8.319	9.98	10.55	11.68	14.30	9.97	13.81	8.72	12.00–11.50	9.50– 9.00	9.20
Dec	8.013	8.225	9.88	10.54	11.83	14.14	9.91	13.69	8.50	11.50–11.50	9.00– 8.50	8.95
1983:												
Jan	7.810	7.898	9.64	10.46	11.79	13.94	9.45	13.49	8.15	11.50–11.00	8.50– 8.50	8.68
Feb	8.130	8.233	9.91	10.72	12.01	13.95	9.48	13.16	8.39	11.00–10.50	8.50– 8.50	8.51
Mar	8.304	8.325	9.84	10.51	11.73	13.61	9.16	13.41	8.48	10.50–10.50	8.50– 8.50	8.77
Apr	8.252	8.343	9.76	10.40	11.51	13.29	8.96	12.42	8.48	10.50–10.50	8.50– 8.50	8.80
May	8.19	8.20	9.66	10.38	11.46	13.09	9.03	12.67	8.31	10.50–10.50	8.50– 8.50	8.63
June	8.82	8.89	10.32	10.85	11.74	13.37	9.51	12.36	9.03	10.50–10.50	8.50– 8.50	8.98
July	9.12	9.29	10.90	11.38	12.15	13.39	9.46	12.50	9.36	10.50–10.50	8.50– 8.50	9.37
Aug	9.39	9.53	11.30	11.85	12.51	13.64	9.72	12.38	9.68	11.00–10.50	8.50– 8.50	9.56
Sept	9.05	9.19	11.07	11.65	12.37	13.55	9.57	12.54	9.28	11.00–11.00	8.50– 8.50	9.45
Oct	8.71	8.90	10.87	11.54	12.25	13.46	9.64	12.25	8.98	11.00–11.00	8.50– 8.50	9.48
Nov	8.71	8.89	10.96	11.69	12.41	13.61	9.79	12.34	9.09	11.00–11.00	8.50– 8.50	9.34
Dec	8.96	9.14	11.13	11.83	12.57	13.75	9.90	12.42	9.50	11.00–11.00	8.50– 8.50	9.47
1984:												
Jan	8.93	9.06	10.93	11.67	12.20	13.65	9.61	12.29	9.18	11.00–11.00	8.50– 8.50	9.56
Feb	9.03	9.13	11.05	11.84	12.08	13.59	9.63	12.23	9.31	11.00–11.00	8.50– 8.50	9.59
Mar	9.44	9.58	11.59	12.32	12.57	13.99	9.92	12.02	9.86	11.50–11.00	8.50– 8.50	9.91
Apr	9.69	9.83	11.98	12.63	12.81	14.31	9.98	12.04	10.22	12.00–11.50	9.00– 8.50	10.29
May	9.90	10.31	12.75	13.41	13.28	14.74	10.55	12.18	10.87	12.50–12.00	9.00– 9.00	10.32
June	9.94	10.55	13.18	13.56	13.55	15.05	10.71	12.10	11.23	13.00–12.50	9.00– 9.00	11.06
July	10.13	10.58	13.08	13.36	13.44	15.15	10.50	12.50	11.34	13.00–13.00	9.00– 9.00	11.23
Aug	10.49	10.65	12.50	12.72	12.87	14.63	10.03	12.43	11.16	13.00–13.00	9.00– 9.00	11.64
Sept	10.41	10.51	12.34	12.52	12.66	14.35	10.17	12.53	10.94	13.00–12.75	9.00– 9.00	11.30
Oct	9.97	10.05	11.85	12.16	12.63	13.94	10.34	12.77	10.16	12.75–12.00	9.00– 9.00	9.99
Nov	8.79	8.99	10.90	11.57	12.29	13.48	10.27	12.75	9.06	12.00–11.25	9.00– 8.50	9.43
Dec	8.16	8.36	10.56	11.50	12.13	13.40	10.04	12.55	8.55	11.25–10.75	8.50– 8.00	8.38
1985:												
Jan	7.76	8.03	10.43	11.38	12.08	13.26	9.55	12.27	8.15	10.75–10.50	8.00– 8.00	8.35
Feb	8.22	8.34	10.55	11.51	12.13	13.23	9.66	12.21	8.69	10.50–10.50	8.00– 8.00	8.50
Mar	8.57	8.92	11.05	11.86	12.56	13.69	9.79	11.92	9.23	10.50–10.50	8.00– 8.00	8.58
Apr	8.00	8.31	10.49	11.43	12.23	13.51	9.48	12.05	8.47	10.50–10.50	8.00– 8.00	8.27
May	7.56	7.75	9.75	10.85	11.72	13.15	9.08	12.01	7.88	10.50–10.00	8.00– 7.50	7.97
June	7.01	7.16	9.05	10.16	10.94	12.40	8.78	11.75	7.38	10.00– 9.50	7.50– 7.50	7.53
July	7.05	7.16	9.18	10.31	10.97	12.43	8.90	11.34	7.57	9.50– 9.50	7.50– 7.50	7.88
Aug	7.18	7.35	9.31	10.33	11.05	12.50	9.18	11.24	7.74	9.50– 9.50	7.50– 7.50	7.90
Sept	7.08	7.27	9.37	10.37	11.07	12.48	9.37	11.17	7.86	9.50– 9.50	7.50– 7.50	7.92
Oct	7.17	7.32	9.25	10.24	11.02	12.36	9.24	11.09	7.79	9.50– 9.50	7.50– 7.50	7.99
Nov	7.20	7.26	8.88	9.78	10.55	11.99	8.64	11.01	7.69	9.50– 9.50	7.50– 7.50	8.05
Dec	7.07	7.09	8.40	9.26	10.16	11.58	8.51	10.94	7.62	9.50– 9.50	7.50– 7.50	8.27
1986:												
Jan	7.04	7.13	8.41	9.19	10.05	11.44	8.06	10.89	7.62	9.50– 9.50	7.50– 7.50	8.14
Feb	7.03	7.08	8.10	8.70	9.67	11.11	7.44	10.68	7.54	9.50– 9.50	7.50– 7.50	7.86
Mar	6.59	6.60	7.30	7.78	9.00	10.49	7.07	10.50	7.08	9.50– 9.00	7.50– 7.00	7.48
Apr	6.06	6.07	6.86	7.30	8.79	10.19	7.32	10.27	6.47	9.00– 8.50	7.00– 6.50	6.99
May	6.12	6.16	7.27	7.71	9.09	10.29	7.67	10.22	6.53	8.50– 8.50	6.50– 6.50	6.85
June	6.21	6.28	7.41	7.80	9.13	10.34	7.98	10.15	6.63	8.50– 8.50	6.50– 6.50	6.92
July	5.84	5.85	6.86	7.30	8.88	10.16	7.62	10.30	6.24	8.50– 8.00	6.50– 6.00	6.56
Aug	5.57	5.58	6.49	7.17	8.72	10.18	7.31	10.26	5.83	8.00– 7.50	6.00– 5.50	6.17
Sept	5.19	5.31	6.62	7.45	8.89	10.21	7.14	10.17	5.61	7.50– 7.50	5.50– 5.50	5.89
Oct	5.18	5.26	6.56	7.43	8.86	10.24	7.12	10.02	5.61	7.50– 7.50	5.50– 5.50	5.85
Nov	5.35	5.42	6.46	7.25	8.68	10.07	6.86	9.91	5.69	7.50– 7.50	5.50– 5.50	6.04
Dec	5.49	5.53	6.43	7.11	8.49	9.97	6.93	9.69	5.88	7.50– 7.50	5.50– 5.50	6.91

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[5] Bank-discount basis; prior to November 1979, data are for 4–6 months paper.

[6] For monthly data, high and low for the period. Prime rate for 1929–33 and 1947–48 are ranges of the rate in effect during the period.

[7] Since July 19, 1975, the daily effective rate is an average of the rates on a given day weighted by the volume of transactions at these rates. Prior to that date, the daily effective rate was the rate considered most representative of the day's transactions, usually the one at which most transactions occurred.

[8] From October 30, 1942, to April 24, 1946, a preferential rate of 0.50 percent was in effect for advances secured by Government securities maturing in 1 year or less.

Sources: Department of the Treasury, Board of Governors of the Federal Reserve System, Federal Home Loan Bank Board (FHLBB), Moody's Investors Service, and Standard & Poor's Corporation.

TABLE B–69.—*Total funds raised in credit markets by nonfinancial sectors, 1977–86*

[Billions of dollars; quarterly data at seasonally adjusted annual rates]

Item	1977	1978	1979	1980	1981	1982	1983	1984	1985
	Net credit market borrowing by nonfinancial sectors								
Total net borrowing by domestic nonfinancial sectors	316.9	371.9	385.7	344.9	375.8	387.4	548.8	756.3	869.3
U.S. Government	56.8	53.7	37.4	79.2	87.4	161.3	186.6	198.8	223.6
Treasury issues	57.6	55.1	38.8	79.8	87.8	162.1	186.7	199.0	223.7
Agency issues and mortgages	−.9	−1.4	−1.4	−.6	−.5	−.9	−.1	−.2	−.1
Private domestic nonfinancial sectors	260.2	318.2	348.4	265.7	288.5	226.2	362.2	557.5	645.7
Debt capital instruments	171.3	200.7	212.5	189.1	155.5	148.3	252.8	314.0	461.7
Tax-exempt obligations	20.3	28.4	30.3	30.3	23.4	44.2	53.7	50.4	152.4
Corporate bonds	22.9	21.1	17.3	27.7	22.8	18.7	16.0	46.1	73.9
Mortgages	128.1	151.2	164.9	131.2	109.3	85.4	183.0	217.5	235.4
Home mortgages	93.3	110.2	116.6	94.2	72.2	50.5	117.1	129.9	150.3
Multi-family residential	8.4	10.9	10.0	7.6	4.8	5.4	14.1	25.1	29.2
Commercial	18.2	21.9	24.4	19.2	22.2	25.2	49.0	63.3	62.4
Farm	8.2	8.2	14.0	10.2	10.0	4.2	2.8	−.8	−6.4
Other debt instruments	88.9	117.6	135.9	76.6	133.0	77.9	109.5	243.5	184.0
Consumer credit	38.1	46.7	42.7	4.5	22.6	17.7	56.8	95.0	96.6
Bank loans n.e.c	26.5	40.5	50.5	37.8	57.0	52.9	25.8	80.1	41.3
Open-market paper	1.6	2.7	9.0	4.0	14.7	−6.1	−.8	21.7	14.6
Other	22.6	27.6	33.7	30.3	38.7	13.4	27.7	46.6	31.4
By borrowing sector: Total	260.2	318.2	348.4	265.7	288.5	226.2	362.2	557.5	645.7
State and local governments	10.5	16.5	17.6	17.2	6.8	21.5	34.0	27.4	107.8
Households	137.5	167.2	173.7	120.0	121.4	88.4	188.0	239.5	295.0
Nonfinancial business	112.2	134.5	157.1	128.5	160.3	116.2	140.2	290.6	242.9
Farm	13.4	15.6	23.5	15.2	16.6	6.8	4.3	.1	−13.6
Nonfarm noncorporate	29.5	33.8	37.9	31.8	38.5	40.2	76.6	97.1	92.8
Corporate	69.3	85.2	95.7	81.5	105.2	69.2	59.3	193.4	163.7
Foreign net borrowing in United States	13.5	24.2	15.1	23.8	23.5	16.0	17.4	6.1	1.7
Bonds	5.1	4.2	3.9	.8	5.4	6.7	3.1	1.3	4.0
Bank loans n.e.c	3.1	18.3	3.1	11.8	3.0	−5.5	3.6	−6.6	−2.8
Open-market paper	.6	1.0	1.7	2.4	3.9	1.9	6.5	6.2	6.2
U.S. Government loans	3.0	3.9	2.9	4.7	4.2	4.5	4.3	4.3	1.6
Total domestic plus foreign	330.4	396.1	400.8	368.7	399.3	403.4	566.2	762.4	871.0
	Direct and indirect supply of funds to credit markets								
Total funds supplied to domestic nonfinancial sectors	316.9	371.9	385.7	344.9	375.8	387.4	548.8	756.3	869.3
Private domestic nonfinancial sectors	191.5	221.8	248.6	237.0	299.0	320.7	382.7	517.4	515.3
Deposits and currency	146.6	149.0	150.8	183.9	222.4	204.5	229.7	321.1	215.1
Checkable deposits and currency	25.3	26.3	28.1	16.8	28.0	28.3	43.1	36.4	54.4
Time and savings deposits	116.9	108.3	76.5	128.2	83.4	140.8	209.0	235.6	151.5
Money market fund shares	.2	6.9	34.4	29.2	107.5	24.7	−44.1	47.2	−2.2
Security repurchase agreements	2.9	5.5	6.7	6.8	5.2	11.1	18.5	7.0	13.4
Foreign deposits	1.3	2.0	5.1	2.8	−1.7	−.4	3.1	−5.1	−2.1
Credit market instruments	44.9	72.8	97.8	53.1	76.6	116.3	153.0	196.4	300.2
Foreign funds	36.9	33.4	18.9	−4.0	−.7	−7.3	41.3	60.9	80.1
At banks	1.1	7.3	26.4	−25.1	−23.7	−31.4	16.3	5.4	17.7
Credit market instruments	35.8	26.1	−7.5	21.1	23.0	24.1	24.9	55.5	62.4
U.S. Government and related loans, net	4.2	3.0	16.7	5.2	10.6	10.4	5.2	18.1	37.7
U.S. Government cash balances	4.3	6.8	.4	−2.6	−1.1	6.1	−5.3	4.0	10.3
Private insurance and pension reserves	58.3	75.7	79.5	88.9	89.6	92.5	110.6	112.5	107.0
Other sources	21.7	31.2	21.6	20.4	−21.4	−35.0	14.4	43.3	119.0

See next page for continuation of table.

TABLE B-69.—*Total funds raised in credit markets by nonfinancial sectors, 1977–86*—Continued

[Billions of dollars; quarterly data at seasonally adjusted annual rates]

Item	1985				1986		
	I	II	III	IV	I	II	III
	Net credit market borrowing by nonfinancial sectors						
Total net borrowing by domestic nonfinancial sectors	658.6	806.6	728.8	1,283.3	551.7	859.1	824.4
U.S. Government	140.2	263.4	149.3	341.7	120.6	301.9	184.5
Treasury issues	140.3	263.5	149.3	341.7	120.9	301.9	184.7
Agency issues and mortgages	−.2	−.1	−.1	−.0	−.3	−.0	−.2
Private domestic nonfinancial sectors	518.4	543.2	579.6	941.6	431.1	557.2	639.9
Debt capital instruments	333.2	377.6	404.7	731.4	332.2	436.7	542.0
Tax-exempt obligations	59.7	75.2	96.0	378.6	−8.3	48.1	156.7
Corporate bonds	67.3	78.1	70.2	80.0	120.6	137.6	99.6
Mortgages	206.2	224.2	238.5	272.9	219.9	251.0	285.6
Home mortgages	125.5	140.7	162.7	172.3	119.9	186.3	205.1
Multi-family residential	22.1	27.2	26.3	41.1	33.2	24.9	31.4
Commercial	59.3	61.2	59.4	69.5	71.7	49.5	54.6
Farm	−.7	−4.9	−9.9	−10.1	−5.0	−9.7	−5.5
Other debt instruments	185.2	165.6	174.9	210.2	98.9	120.4	97.9
Consumer credit	105.5	89.2	112.6	79.2	63.6	87.0	81.1
Bank loans n.e.c.	28.6	21.3	43.3	72.2	22.9	21.2	.8
Open-market paper	11.3	13.2	−.5	34.3	−16.6	−14.9	16.4
Other	39.8	41.9	19.5	24.5	29.0	27.1	−.4
By borrowing sector: Total	518.4	543.2	579.6	941.6	431.1	557.2	639.9
State and local governments	52.9	60.8	71.7	245.8	16.9	64.5	161.2
Households	237.6	269.6	302.9	369.8	173.6	283.4	305.1
Nonfinancial business	227.9	212.8	204.9	326.0	240.7	209.2	173.6
Farm	−7.6	−4.2	−15.3	−27.2	−12.5	−17.6	−4.5
Nonfarm noncorporate	79.4	91.7	92.2	107.6	105.6	84.8	84.6
Corporate	156.0	125.3	128.0	245.6	147.5	142.1	93.4
Foreign net borrowing in United States	−5.8	−2.4	12.0	2.9	34.5	14.1	−5.2
Bonds	2.5	8.5	2.6	2.5	16.1	−1.9	2.5
Bank loans n.e.c.	−8.3	−3.8	7.5	−6.7	−4.8	7.6	−24.0
Open-market paper	3.7	4.8	6.3	10.0	23.9	17.3	14.7
U.S. Government loans	2.1	3.7	.5	.3	.8	−.8	3.8
Total domestic plus foreign	652.7	804.1	740.8	1,286.2	586.2	873.2	819.2
	Direct and indirect supply of funds to credit markets						
Total funds supplied to domestic nonfinancial sectors	658.6	806.6	728.8	1,283.3	551.7	859.1	824.4
Private domestic nonfinancial sectors	378.4	473.7	493.6	715.3	207.2	424.5	269.8
Deposits and currency	203.7	228.1	286.3	142.3	226.1	253.8	245.9
Checkable deposits and currency	−10.2	78.2	113.8	35.8	44.0	147.5	35.0
Time and savings deposits	197.3	135.2	159.1	114.6	154.6	87.3	135.4
Money market fund shares	−12.1	20.4	−21.2	4.0	27.0	30.9	49.8
Security repurchase ageements	23.4	5.3	19.5	5.6	−2.9	−21.0	14.8
Foreign deposits	5.3	−11.1	15.1	−17.7	3.4	9.0	10.9
Credit market instruments	174.7	245.6	207.3	573.1	−19.0	170.7	24.0
Foreign funds	59.0	65.4	89.4	106.8	146.6	90.3	126.6
At banks	24.7	−2.3	23.3	25.2	36.6	−36.2	.1
Credit market instruments	34.3	67.7	66.1	81.5	109.9	126.5	126.5
U.S. Government and related loans, net	64.1	59.8	16.8	10.1	−30.4	26.1	39.1
U.S. Government cash balances	−5.1	33.9	−68.4	80.6	−54.2	43.2	−13.4
Private insurance and pension reserves	97.6	97.2	126.7	106.5	99.6	118.7	197.5
Other sources	64.6	76.5	70.7	264.0	182.9	156.2	204.7

Source: Board of Governors of the Federal Reserve System.

TABLE B–70.—*Mortgage debt outstanding by type of property and of financing, 1939–86*

[Billions of dollars]

End of year or quarter	All properties	Farm properties	Nonfarm properties				Nonfarm properties by type of mortgage					
			Total	1- to 4-family houses	Multifamily properties	Commercial properties	Government underwritten				Conventional [2]	
							Total [1]	1- to 4-family houses			Total	1- to 4-family houses
								Total	FHA insured	VA guaranteed		
1939	35.5	6.6	28.9	16.3	5.6	7.0	1.8	1.8	1.8	......	27.1	14.5
1940	36.5	6.5	30.0	17.4	5.7	6.9	2.3	2.3	2.3	......	27.7	15.1
1941	37.6	6.4	31.2	18.4	5.9	7.0	3.0	3.0	3.0	......	28.2	15.4
1942	36.7	6.0	30.8	18.2	5.8	6.7	3.7	3.7	3.7	......	27.1	14.5
1943	35.3	5.4	29.9	17.8	5.8	6.3	4.1	4.1	4.1	......	25.8	13.7
1944	34.7	4.9	29.7	17.9	5.6	6.2	4.2	4.2	4.2	......	25.5	13.7
1945	35.5	4.8	30.8	18.6	5.7	6.4	4.3	4.3	4.1	0.2	26.5	14.3
1946	41.8	4.9	36.9	23.0	6.1	7.7	6.3	6.1	3.7	2.4	30.6	16.9
1947	48.9	5.1	43.9	28.2	6.6	9.1	9.8	9.3	3.8	5.5	34.1	18.9
1948	56.2	5.3	50.9	33.3	7.5	10.2	13.6	12.5	5.3	7.2	37.3	20.8
1949	62.7	5.6	57.1	37.6	8.6	10.8	17.1	15.0	6.9	8.1	40.0	22.6
1950	72.8	6.1	66.7	45.2	10.1	11.5	22.1	18.8	8.5	10.3	44.7	26.3
1951	82.3	6.7	75.6	51.7	11.5	12.5	26.6	22.9	9.7	13.2	49.1	28.9
1952	91.4	7.2	84.2	58.5	12.3	13.4	29.3	25.4	10.8	14.6	54.9	33.2
1953	101.3	7.7	93.6	66.1	12.9	14.5	32.1	28.1	12.0	16.1	61.5	38.0
1954	113.7	8.2	105.4	75.7	13.5	16.3	36.2	32.1	12.8	19.3	69.3	43.6
1955	129.9	9.0	120.9	88.2	14.3	18.3	42.9	38.9	14.3	24.6	78.0	49.3
1956	144.5	9.8	134.6	99.0	14.9	20.7	47.8	43.9	15.5	28.4	86.8	55.1
1957	156.5	10.4	146.1	107.6	15.3	23.2	51.6	47.2	16.5	30.7	94.6	60.4
1958	171.8	11.1	160.7	117.7	16.8	26.1	55.2	50.1	19.7	30.4	105.5	67.6
1959	190.8	12.1	178.7	130.9	18.7	29.2	59.3	53.8	23.8	30.0	119.4	77.0
1960	207.5	12.8	194.7	141.9	20.3	32.4	62.3	56.4	26.7	29.7	132.3	85.5
1961	228.0	13.9	214.1	154.6	23.0	36.5	65.6	59.1	29.5	29.6	148.5	95.5
1962	251.4	15.2	236.2	169.3	25.8	41.1	69.4	62.2	32.3	29.9	166.9	107.1
1963	278.5	16.8	261.7	186.4	29.0	46.2	73.4	65.9	35.0	30.9	188.2	120.5
1964	305.9	18.9	287.0	203.4	33.6	50.0	77.2	69.2	38.3	30.9	209.8	134.1
1965	333.3	21.2	312.1	220.5	37.2	54.5	81.2	73.1	42.0	31.1	231.0	147.4
1966	356.5	23.1	333.4	232.9	40.3	60.1	84.1	76.1	44.8	31.3	249.3	156.9
1967	381.2	25.1	356.1	247.3	43.9	64.8	88.2	79.9	47.4	32.5	267.9	167.4
1968	410.9	27.4	383.5	264.8	47.3	71.4	93.4	84.4	50.6	33.8	290.1	180.4
1969	441.4	29.2	412.2	283.2	52.2	76.9	100.2	90.2	54.5	35.7	312.0	193.0
1970	473.5	30.3	443.2	297.4	60.1	85.6	109.2	97.3	59.9	37.3	333.9	200.2
1971	524.0	32.2	491.8	325.9	70.1	95.9	120.7	105.2	65.7	39.5	371.1	220.7
1972	597.1	35.1	562.0	366.5	82.8	112.7	131.1	113.0	68.2	44.7	430.9	253.5
1973	672.3	39.5	632.8	407.9	93.1	131.7	135.0	116.2	66.2	50.0	497.7	291.7
1974	732.3	44.7	687.5	440.7	100.0	146.9	140.2	121.3	65.1	56.2	547.3	319.4
1975	791.7	49.7	742.0	482.1	100.6	159.3	147.0	127.7	66.1	61.6	595.0	354.3
1976	878.5	55.3	823.2	546.3	105.7	171.2	154.1	133.5	66.5	67.0	669.0	412.8
1977	1,009.8	63.5	946.4	642.7	114.0	189.7	161.7	141.6	68.0	73.6	784.6	501.0
1978	1,161.9	71.6	1,090.2	753.5	124.9	211.8	176.4	153.4	71.4	82.0	913.9	600.2
1979	1,327.3	85.6	1,241.7	870.5	134.9	236.3	199.0	172.9	81.0	92.0	1,042.7	697.6
1980	1,457.5	95.8	1,361.8	963.9	142.3	255.5	225.1	195.2	93.6	101.6	1,136.7	768.8
1981	1,564.0	105.8	1,458.2	1,038.5	142.1	277.5	238.9	207.6	101.3	106.2	1,219.3	830.9
1982	1,631.3	110.0	1,521.2	1,074.7	145.8	300.8	248.9	217.9	108.0	109.9	1,272.4	856.8
1983	1,813.9	112.8	1,701.0	1,189.8	160.8	350.4	279.8	248.8	127.4	121.4	1,421.2	941.0
1984	2,034.6	112.0	1,922.6	1,318.9	185.4	418.3	294.8	265.9	136.7	129.1	1,627.8	1,053.0
1985	2,266.3	105.6	2,160.7	1,466.1	213.8	480.7	328.3	288.8	153.0	135.8	1,832.3	1,177.3
1984: I	1,863.8	112.3	1,751.5	1,217.0	166.4	368.0	286.8	255.9	131.1	124.8	1,464.7	961.1
II	1,926.8	112.6	1,814.3	1,254.2	174.2	385.9	290.5	260.5	133.6	126.9	1,523.8	993.7
III	1,983.7	112.6	1,871.0	1,288.1	179.6	403.3	292.9	263.6	135.6	128.0	1,578.2	1,024.5
IV	2,034.6	112.0	1,922.6	1,318.9	185.4	418.3	294.8	265.9	136.7	129.1	1,627.8	1,053.0
1985: I	2,080.9	111.9	1,969.0	1,346.6	190.9	431.5	299.7	270.6	139.8	130.8	1,669.3	1,076.0
II	2,139.6	110.9	2,028.8	1,383.2	197.5	448.1	305.4	276.0	144.3	131.6	1,723.4	1,107.2
III	2,200.6	108.3	2,092.3	1,425.4	203.6	463.3	323.8	282.6	148.3	134.3	1,768.4	1,142.7
IV	2,266.3	105.6	2,160.7	1,466.1	213.8	480.7	328.3	288.8	153.0	135.8	1,832.3	1,177.3
1986: I	2,315.0	103.9	2,211.1	1,493.8	221.5	495.9	339.9	299.1	160.6	138.5	1,871.3	1,194.7
II	2,381.2	101.6	2,279.6	1,541.5	228.3	509.9	349.7	308.3	168.9	139.4	1,929.9	1,233.2
III	2,456.5	100.1	2,356.3	1,595.3	236.1	524.9	......	......	......	142.7	......	......

[1] Includes FHA insured multifamily properties, not shown separately.

[2] Derived figures. Total includes multifamily and commercial properties, not shown separately.

Source: Board of Governors of the Federal Reserve System, based on data from various Government and private organizations.

TABLE B-71.—*Mortgage debt outstanding by holder, 1939–86*

[Billions of dollars]

End of year or quarter	Total	Major financial institutions					Other holders	
		Total	Savings and loan associations	Savings banks	Commercial banks [1]	Life insurance companies	Federal and related agencies [2]	Individuals and others
1939	35.5	18.6	3.8	4.8	4.3	5.7	5.0	11.9
1940	36.5	19.5	4.1	4.9	4.6	6.0	4.9	12.0
1941	37.6	20.7	4.6	4.8	4.9	6.4	4.7	12.2
1942	36.7	20.7	4.6	4.6	4.7	6.7	4.3	11.7
1943	35.3	20.2	4.6	4.4	4.5	6.7	3.6	11.5
1944	34.7	20.2	4.8	4.3	4.4	6.7	3.0	11.5
1945	35.5	21.0	5.4	4.2	4.8	6.6	2.4	12.1
1946	41.8	26.0	7.1	4.4	7.2	7.2	2.0	13.8
1947	48.9	31.8	8.9	4.9	9.4	8.7	1.8	15.3
1948	56.2	37.8	10.3	5.8	10.9	10.8	1.8	16.6
1949	62.7	42.9	11.6	6.7	11.6	12.9	2.3	17.5
1950	72.8	51.7	13.7	8.3	13.7	16.1	2.8	18.4
1951	82.3	59.5	15.6	9.9	14.7	19.3	3.5	19.3
1952	91.4	66.9	18.4	11.4	15.9	21.3	4.1	20.4
1953	101.3	75.1	22.0	12.9	16.9	23.3	4.6	21.7
1954	113.7	85.7	26.1	15.0	18.6	26.0	4.8	23.2
1955	129.9	99.3	31.4	17.5	21.0	29.4	5.3	25.3
1956	144.5	111.2	35.7	19.7	22.7	33.0	6.2	27.1
1957	156.5	119.7	40.0	21.2	23.3	35.2	7.7	29.1
1958	171.8	131.5	45.6	23.3	25.5	37.1	8.0	32.3
1959	190.8	145.5	53.1	25.0	28.1	39.2	10.2	35.1
1960	207.5	157.6	60.1	26.9	28.8	41.8	11.5	38.4
1961	228.0	172.6	68.8	29.1	30.4	44.2	12.2	43.1
1962	251.4	192.5	78.8	32.3	34.5	46.9	12.6	46.3
1963	278.5	217.1	90.9	36.2	39.4	50.5	11.8	49.5
1964	305.9	241.0	101.3	40.6	44.0	55.2	12.2	52.7
1965	333.3	264.6	110.3	44.6	49.7	60.0	13.5	55.2
1966	356.5	280.8	114.4	47.3	54.4	64.6	17.5	58.2
1967	381.2	298.8	121.8	50.5	59.0	67.5	20.9	61.4
1968	410.9	319.9	130.8	53.5	65.7	70.0	25.1	65.9
1969	441.4	339.1	140.2	56.1	70.7	72.0	31.1	71.2
1970	473.5	355.9	150.3	57.9	73.3	74.4	38.3	79.3
1971	524.0	394.2	174.3	62.0	82.5	75.5	46.4	83.4
1972	597.1	450.0	206.2	67.6	99.3	76.9	54.6	92.5
1973	672.3	505.4	231.7	73.2	119.1	81.4	64.8	102.2
1974	732.3	542.6	249.3	74.9	132.1	86.2	82.2	107.5
1975	791.7	581.2	278.6	77.2	136.2	89.2	101.1	109.4
1976	878.5	647.5	323.0	81.6	151.3	91.6	116.7	114.3
1977	1,009.8	745.2	381.2	88.2	179.0	96.8	140.5	124.1
1978	1,161.9	848.2	432.8	95.2	214.0	106.2	170.6	143.1
1979	1,327.3	938.2	475.7	98.9	245.2	118.4	216.0	173.1
1980	1,457.5	996.8	503.2	99.9	262.7	131.1	256.8	203.9
1981	1,564.0	1,040.5	518.5	100.0	284.2	137.7	289.4	234.1
1982	1,631.3	1,021.3	483.6	94.5	301.3	142.0	355.4	254.5
1983	1,813.9	1,108.2	494.8	131.9	330.5	151.0	433.4	272.2
1984	2,034.6	1,245.9	555.3	154.4	379.5	156.7	491.1	297.6
1985	2,266.3	1,361.7	583.2	177.3	429.4	171.8	582.0	322.6
1984: I	1,863.8	1,137.8	503.5	139.1	343.9	151.3	448.4	277.6
II	1,926.8	1,181.6	528.2	143.4	356.5	153.5	458.9	286.3
III	1,983.7	1,219.4	550.1	146.1	367.9	155.4	472.3	291.9
IV	2,034.6	1,245.9	555.3	154.4	379.5	156.7	491.1	297.6
1985: I	2,080.9	1,266.9	559.3	161.0	388.2	158.5	511.3	302.6
II	2,139.6	1,297.9	569.3	165.7	400.7	162.1	531.7	310.1
III	2,200.6	1,328.5	573.7	174.4	415.6	164.8	555.2	316.9
IV	2,266.3	1,361.7	583.2	177.3	429.4	171.8	582.0	322.6
1986: I	2,315.0	1,379.0	574.7	188.2	441.3	174.8	605.7	330.3
II	2,381.2	1,404.6	565.2	203.2	456.1	180.0	637.0	339.6
III	2,456.5	1,429.9	558.4	214.2	472.0	185.2	680.6	346.1

[1] Includes loans held by nondeposit trust companies, but not by bank trust departments.

[2] Includes former Federal National Mortgage Association (FNMA) and new Government National Mortgage Association (GNMA), as well as Federal Housing Administration, Veterans Administration, Public Housing Administration, Farmers Home Administration (FmHA), and in earlier years Reconstruction Finance Corporation, Homeowners Loan Corporation, and Federal Farm Mortgage Corporation. Also includes U.S.-sponsored agencies such as new FNMA, Federal Land Banks, Federal Home Loan Mortgage Corporation (FHLMC), and mortgage pass-through securities issued or guaranteed by GNMA, FHLMC, FNMA or FmHA. Other U.S. agencies (amounts small or current separate data not readily available) included with "individuals and others."

Source: Board of Governors of the Federal Reserve System, based on data from various Government and private organizations.

TABLE B–72.—*Consumer credit outstanding, 1950–86*

[Amount outstanding (end of month); millions of dollars, seasonally adjusted]

Year and month	Total consumer credit	Installment credit [1]					Noninstallment credit [4]
		Total	Automobile	Revolving [2]	Mobile home [3]	Other	
December:							
1950	25,018	15,166	6,035	......	......	9,131	9,852
1951	26,576	15,859	5,981	......	......	9,878	10,717
1952	31,830	20,121	7,651	......	......	12,470	11,709
1953	35,928	23,870	9,702	......	......	14,168	12,058
1954	37,293	24,470	9,755	......	......	14,715	12,823
1955	44,319	29,809	13,485	......	......	16,324	14,510
1956	48,224	32,660	14,499	......	......	18,161	15,564
1957	51,136	34,914	15,493	......	......	19,421	16,222
1958	51,595	34,736	14,267	......	......	20,469	16,859
1959	59,432	40,421	16,641	......	......	23,780	19,011
1960	63,928	44,335	18,108	......	......	26,227	19,593
1961	66,569	45,438	17,656	......	......	27,782	21,131
1962	72,830	50,375	20,001	......	......	30,374	22,455
1963	81,578	57,056	22,891	......	......	34,165	24,522
1964	91,279	64,674	25,865	......	......	38,809	26,605
1965	101,726	72,814	29,378	......	......	43,436	28,912
1966	108,227	78,162	31,024	......	......	47,138	30,065
1967	113,628	81,783	31,136	......	......	50,647	31,845
1968	124,915	90,112	34,352	2,022	......	53,738	34,803
1969	135,431	99,381	36,946	3,563	......	58,872	36,050
1970	141,010	103,905	36,348	4,900	2,433	60,224	37,105
1971	155,537	116,434	40,522	8,252	7,171	60,489	39,103
1972	175,286	131,258	47,835	9,391	9,468	64,564	44,028
1973	200,894	152,910	53,740	11,318	13,505	74,347	47,984
1974	210,634	162,203	54,241	13,232	14,582	80,148	48,431
1975	217,428	167,043	56,989	14,507	15,388	80,159	50,385
1976	241,989	187,782	66,821	16,595	15,738	88,628	54,207
1977	279,428	221,475	80,948	36,689	16,362	87,476	57,953
1978	325,433	261,976	98,739	45,202	16,921	101,114	63,457
1979	366,854	296,483	112,475	53,357	18,207	112,444	70,371
1980	371,219	297,667	112,255	54,894	19,119	111,399	73,552
1981	393,701	314,321	120,020	60,750	20,382	113,169	79,380
1982	411,709	327,173	125,369	66,007	20,998	114,799	84,536
1983	471,784	376,239	145,908	78,369	22,194	129,768	95,545
1984	568,127	453,580	173,122	98,514	24,184	157,760	114,547
1985	668,216	535,098	206,482	118,296	25,461	184,859	133,118
1985: Jan	576,121	459,843	175,845	100,263	24,139	159,596	116,278
Feb	584,896	466,690	178,251	102,373	24,360	161,706	118,206
Mar	595,246	474,989	181,514	105,297	24,468	163,710	120,257
Apr	604,592	482,532	184,526	107,417	24,570	166,019	122,060
May	613,127	488,862	187,533	108,372	24,670	168,287	124,265
June	619,473	493,253	189,459	109,260	24,768	169,766	126,220
July	628,255	500,039	191,201	110,904	25,015	172,919	128,216
Aug	636,234	506,090	192,923	112,373	25,173	175,621	130,144
Sept	647,776	516,420	198,656	113,850	25,341	178,573	131,356
Oct	654,249	522,978	201,994	115,218	25,320	180,446	131,271
Nov	660,462	528,621	203,766	117,050	25,315	182,490	131,841
Dec	668,216	535,098	206,482	118,296	25,461	184,859	133,118
1986: Jan	678,067	542,753	210,661	119,682	25,371	187,039	135,314
Feb	682,855	547,852	213,342	120,724	25,573	188,212	135,003
Mar	686,810	550,939	214,361	122,131	25,584	188,863	135,871
Apr	694,403	555,810	215,814	123,442	25,513	191,041	138,593
May	702,353	562,267	218,965	124,545	25,560	193,197	140,086
June	708,541	567,653	222,606	124,720	25,479	194,847	140,888
July	715,112	573,216	226,234	125,577	25,398	196,007	141,896
Aug	719,507	576,609	228,814	125,915	25,215	196,665	142,898
Sept	727,128	584,334	236,280	126,012	24,958	197,084	142,794
Oct	735,348	591,542	240,548	126,514	24,994	199,485	143,806
Nov	739,208	595,560	241,392	128,102	25,029	201,036	143,648

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[1] Installment credit covers most short- and intermediate-term credit extended to individuals through regular business channels, usually to finance the purchase of consumer goods and services or to refinance debts incurred for such purposes, and scheduled to be repaid (or with the option of repayment) in two or more installments. Credit secured by real estate is generally excluded.

[2] Consists of credit cards at retailers, gasoline companies, and commercial banks, and check credit at commercial banks. Prior to 1968, included in "other," except gasoline companies, included in noninstallment credit prior to 1971. Beginning 1977, includes open-end credit at retailers, previously included in "other." Also beginning 1977, some retail credit was reclassified from commercial into consumer credit.

[3] Not reported separately prior to July 1970.

[4] Noninstallment credit is credit scheduled to be repaid in a lump sum, including single-payment loans, charge accounts, and service credit. Because of inconsistencies in the data and infrequent benchmarking, series is no longer published by the Federal Reserve Board on a regular basis. Data are shown here as a general indication of trends.

Source: Board of Governors of the Federal Reserve System.

Table B–73.—*Federal receipts, outlays, surplus or deficit, and debt, selected fiscal years 1929–88*

[Billions of dollars; fiscal years]

Fiscal year or period	Total			On-budget			Off-budget			Gross Federal debt (end of period)		Addendum: Gross national product
	Receipts	Outlays	Surplus or deficit (–)	Receipts	Outlays	Surplus or deficit (–)	Receipts	Outlays	Surplus or deficit (–)	Total	Held by the public	
1929	3.9	3.1	0.7	....	....	....	....	....	....	[1] 16.9	....	....
1933	2.0	4.6	–2.6	....	....	....	....	....	....	[1] 22.5	....	....
1939	6.3	9.1	–2.8	5.8	9.2	–3.4	0.5	0.0	0.5	48.2	41.4	....
1940	6.5	9.5	–2.9	6.0	9.5	–3.5	.6	.0	.6	50.7	42.8	95.8
1941	8.7	13.7	–4.9	8.0	13.6	–5.6	.7	.0	.7	57.5	48.2	113.0
1942	14.6	35.1	–20.5	13.7	35.1	–21.3	.9	.1	.8	79.2	67.8	142.2
1943	24.0	78.6	–54.6	22.9	78.5	–55.6	1.1	.1	1.0	142.6	127.8	175.8
1944	43.7	91.3	–47.6	42.5	91.2	–48.7	1.3	.1	1.2	204.1	184.8	202.0
1945	45.2	92.7	–47.6	43.8	92.6	–48.7	1.3	.1	1.2	260.1	235.2	212.4
1946	39.3	55.2	–15.9	38.1	55.0	–17.0	1.2	.2	1.0	271.0	241.9	212.9
1947	38.5	34.5	4.0	37.1	34.2	2.9	1.5	.3	1.2	257.1	224.3	223.6
1948	41.6	29.8	11.8	39.9	29.4	10.5	1.6	.4	1.2	252.0	216.3	247.8
1949	39.4	38.8	.6	37.7	38.4	–.7	1.7	.4	1.3	252.6	214.3	263.9
1950	39.4	42.6	–3.1	37.3	42.0	–4.7	2.1	.5	1.6	256.9	219.0	266.8
1951	51.6	45.5	6.1	48.5	44.2	4.3	3.1	1.3	1.8	255.3	214.3	315.0
1952	66.2	67.7	–1.5	62.6	66.0	–3.4	3.6	1.7	1.9	259.1	214.8	342.4
1953	69.6	76.1	–6.5	65.5	73.8	–8.3	4.1	2.3	1.8	266.0	218.4	365.6
1954	69.7	70.9	–1.2	65.1	67.9	–2.8	4.6	2.9	1.7	270.8	224.5	369.5
1955	65.5	68.4	–3.0	60.4	64.5	–4.1	5.1	4.0	1.1	274.4	226.6	386.4
1956	74.6	70.6	3.9	68.2	65.7	2.5	6.4	5.0	1.5	272.8	222.2	418.1
1957	80.0	76.6	3.4	73.2	70.6	2.6	6.8	6.0	.8	272.4	219.4	440.5
1958	79.6	82.4	–2.8	71.6	74.9	–3.3	8.0	7.5	.5	279.7	226.4	450.2
1959	79.2	92.1	–12.8	71.0	83.1	–12.1	8.3	9.0	–.7	287.8	235.0	481.5
1960	92.5	92.2	.3	81.9	81.3	.5	10.6	10.9	–.2	290.9	237.2	506.7
1961	94.4	97.7	–3.3	82.3	86.0	–3.8	12.1	11.7	.4	292.9	238.6	518.2
1962	99.7	106.8	–7.1	87.4	93.3	–5.9	12.3	13.5	–1.3	303.3	248.4	557.7
1963	106.6	111.3	–4.8	92.4	96.4	–4.0	14.2	15.0	–.8	310.8	254.5	587.3
1964	112.6	118.5	–5.9	96.2	102.8	–6.5	16.4	15.7	.6	316.8	257.6	629.2
1965	116.8	118.2	–1.4	100.1	101.7	–1.6	16.7	16.5	.2	323.2	261.6	672.6
1966	130.8	134.5	–3.7	111.7	114.8	–3.1	19.1	19.7	–.6	329.5	264.7	739.0
1967	148.8	157.5	–8.6	124.4	137.0	–12.6	24.4	20.4	4.0	341.3	267.5	794.6
1968	153.0	178.1	–25.2	128.1	155.8	–27.7	24.9	22.3	2.6	369.8	290.6	849.4
1969	186.9	183.6	3.2	157.9	158.4	–.5	29.0	25.2	3.7	367.1	279.5	929.5
1970	192.8	195.6	–2.8	159.3	168.0	–8.7	33.5	27.6	5.9	382.6	284.9	990.2
1971	187.1	210.2	–23.0	151.3	177.3	–26.1	35.8	32.8	3.0	409.5	304.3	1,055.9
1972	207.3	230.7	–23.4	167.4	193.8	–26.4	39.9	36.9	3.1	437.3	323.8	1,153.1
1973	230.8	245.7	–14.9	184.7	200.1	–15.4	46.1	45.6	.5	468.4	343.0	1,281.4
1974	263.2	269.4	–6.1	209.3	217.3	–8.0	53.9	52.1	1.8	486.2	346.1	1,416.5
1975	279.1	332.3	–53.2	216.6	271.9	–55.3	62.5	60.4	2.0	544.1	396.9	1,522.5
1976	298.1	371.8	–73.7	231.7	302.2	–70.5	66.4	69.6	–3.2	631.9	480.3	1,698.2
Transition quarter	81.2	96.0	–14.7	63.2	76.6	–13.3	18.0	19.4	–1.4	646.4	498.3	[2] 1,794.7
1977	355.6	409.2	–53.6	278.7	328.5	–49.7	76.8	80.7	–3.9	709.1	551.8	1,933.0
1978	399.6	458.7	–59.2	314.2	369.1	–54.9	85.4	89.7	–4.3	780.4	610.9	2,171.8
1979	463.3	503.5	–40.2	365.3	403.5	–38.2	98.0	100.0	–2.0	833.8	644.6	2,447.8
1980	517.1	590.9	–73.8	403.9	476.6	–72.7	113.2	114.3	–1.1	914.3	715.1	2,670.6
1981	599.3	678.2	–78.9	469.1	543.0	–73.9	130.2	135.2	–5.0	1,003.9	794.4	2,986.4
1982	617.8	745.7	–127.9	474.3	594.3	–120.0	143.5	151.4	–7.9	1,147.0	929.4	3,139.1
1983	600.6	808.3	–207.8	453.2	661.2	–208.0	147.3	147.1	.2	1,381.9	1,141.8	3,321.9
1984	666.5	851.8	–185.3	500.4	686.0	–185.6	166.1	165.8	.3	1,576.7	1,312.6	3,686.8
1985	734.1	946.3	–212.3	547.9	769.5	–221.6	186.2	176.8	9.4	1,827.2	1,509.9	3,937.2
1986	769.1	989.8	–220.7	568.9	806.3	–237.5	200.2	183.5	16.7	2,132.9	1,746.1	4,163.3
1987 [3]	842.4	1,015.6	–173.2	628.4	821.1	–192.7	214.0	194.5	19.5	2,372.4	1,908.4	4,418.9
1988 [3]	916.6	1,024.3	–107.8	674.5	821.9	–147.4	242.1	202.4	39.7	2,585.5	2,015.1	4,731.2

[1] Not strictly comparable with later data.

[2] Annual rate.

[3] Estimates.

Note.—Through fiscal year 1976, the fiscal year was on a July 1–June 30 basis; beginning October 1976 (fiscal year 1977), the fiscal year is on an October 1–September 30 basis. The 3-month period from July 1, 1976 through September 30, 1976 is a separate fiscal period known as the transition quarter.

Refunds of receipts are excluded from receipts and outlays.

See "Budget of the United States Government, Fiscal Year 1988" for additional information.

Sources: Department of the Treasury, Office of Management and Budget, and Department of Commerce (Bureau of Economic Analysis).

TABLE B–74.—*Federal receipts, outlays, and debt, fiscal years 1979–88*

[Millions of dollars; fiscal years]

Description	Actual				
	1979	1980	1981	1982	1983
RECEIPTS AND OUTLAYS:					
Total receipts	463,302	517,112	599,272	617,766	600,562
Total outlays	503,464	590,920	678,209	745,706	808,327
Total surplus or deficit (–)	–40,162	–73,808	–78,936	–127,940	–207,764
On-budget receipts	365,309	403,903	469,097	474,299	453,242
On-budget outlays	403,486	476,591	543,013	594,302	661,219
On-budget surplus or deficit (–)	–38,178	–72,689	–73,916	–120,003	–207,977
Off-budget receipts	97,994	113,209	130,176	143,467	147,320
Off-budget outlays	99,978	114,329	135,196	151,404	147,108
Off-budget surplus or deficit (–)	–1,984	–1,120	–5,020	–7,937	212
OUTSTANDING DEBT, END OF PERIOD:					
Gross Federal debt	833,751	914,317	1,003,941	1,146,987	1,381,886
Held by Government agencies	189,162	199,212	209,507	217,560	240,116
Held by the public	644,589	715,105	794,434	929,427	1,141,770
Federal Reserve System	115,594	120,846	124,466	134,497	155,527
Other	528,995	594,259	669,968	794,930	986,243
RECEIPTS: ON-BUDGET AND OFF-BUDGET	463,302	517,112	599,272	617,766	600,562
Individual income taxes	217,841	244,069	285,917	297,744	288,938
Corporation income taxes	65,677	64,600	61,137	49,207	37,022
Social insurance taxes and contributions	138,939	157,803	182,720	201,498	208,994
On-budget	40,945	44,594	52,545	58,031	61,674
Off-budget	97,994	113,209	130,176	143,467	147,320
Excise taxes	18,745	24,329	40,839	36,311	35,300
Estate and gift taxes	5,411	6,389	6,787	7,991	6,053
Customs duties	7,439	7,174	8,083	8,854	8,655
Miscellaneous receipts:					
Deposits of earnings by Federal Reserve System	8,327	11,767	12,834	15,186	14,492
All other	925	981	956	975	1,108
OUTLAYS: ON-BUDGET AND OFF-BUDGET	503,464	590,920	678,209	745,706	808,327
National defense	116,342	133,995	157,513	185,309	209,903
International affairs	7,459	12,714	13,104	12,300	11,848
General science, space, and technology	5,235	5,832	6,469	7,200	7,935
Energy	9,180	10,156	15,166	13,527	9,353
Natural resources and environment	12,135	13,858	13,568	12,998	12,672
Agriculture	11,236	8,839	11,323	15,944	22,901
Commerce and housing credit	4,686	9,390	8,206	6,256	6,681
Transportation	17,532	21,329	23,379	20,625	21,334
Community and regional development	10,480	11,252	10,568	8,347	7,560
Education, training, employment, and social services	30,223	31,843	33,709	27,029	26,606
Health	20,494	23,169	26,866	27,445	28,641
Medicare	26,495	32,090	39,149	46,567	52,588
Income security	66,359	86,540	99,723	107,717	122,598
Social security	104,073	118,547	139,584	155,964	170,724
On-budget	757	675	670	844	19,993
Off-budget	103,316	117,872	138,914	155,120	150,731
Veterans benefits and services	19,931	21,185	22,991	23,958	24,846
Administration of justice	4,169	4,582	4,762	4,703	5,099
General government	3,928	4,448	4,582	4,532	4,789
General purpose fiscal assistance	8,369	8,582	6,854	6,390	6,452
Net interest	42,615	52,512	68,734	84,995	89,774
On-budget	44,839	54,851	71,022	87,065	91,619
Off-budget	–2,224	–2,339	–2,288	–2,071	–1,845
Allowances					
Undistributed offsetting receipts	–17,476	–19,942	–28,041	–26,099	–33,976
On-budget	–16,362	–18,738	–26,611	–24,453	–32,198
Off-budget	–1,114	–1,204	–1,430	–1,646	–1,778

See next page for continuation of table.

TABLE B-74.—*Federal receipts, outlays, and debt, fiscal years 1979–88*—Continued

[Millions of dollars; fiscal years]

Description	Actual			Estimates	
	1984	1985	1986	1987	1988
RECEIPTS AND OUTLAYS:					
Total receipts	666,457	734,057	769,091	842,390	916,571
Total outlays	851,781	946,316	989,815	1,015,572	1,024,328
Total surplus or deficit (–)	–185,324	–212,260	–220,725	–173,182	–107,756
On-budget receipts	500,382	547,886	568,862	628,372	674,473
On-budget outlays	685,968	769,509	806,318	821,074	821,900
On-budget surplus or deficit (–)	–185,586	–221,623	–237,455	–192,702	–147,427
Off-budget receipts	166,075	186,171	200,228	214,018	242,098
Off-budget outlays	165,813	176,807	183,498	194,498	202,427
Off-budget surplus or deficit (–)	262	9,363	16,731	19,520	39,671
OUTSTANDING DEBT, END OF PERIOD:					
Gross Federal debt	1,576,748	1,827,234	2,132,913	2,372,429	2,585,466
Held by Government agencies	264,159	317,377	386,772	464,040	570,356
Held by the public	1,312,589	1,509,857	1,746,141	1,908,389	2,015,110
Federal Reserve System	155,122	169,806	190,855	....	....
Other	1,157,467	1,340,051	1,555,286	....	....
RECEIPTS: ON-BUDGET AND OFF-BUDGET	666,457	734,057	769,091	842,390	916,571
Individual income taxes	298,415	334,531	348,959	364,002	392,821
Corporation income taxes	56,893	61,331	63,143	104,761	117,207
Social insurance taxes and contributions	239,376	265,163	283,901	301,460	333,184
On-budget	73,301	78,992	83,673	87,442	91,086
Off-budget	166,075	186,171	200,228	214,018	242,098
Excise taxes	37,361	35,992	32,919	32,602	33,406
Estate and gift taxes	6,010	6,422	6,958	5,998	5,817
Customs duties	11,370	12,079	13,327	14,445	15,274
Miscellaneous receipts:					
Deposits of earnings by Federal Reserve System	15,684	17,059	18,374	15,822	15,450
All other	1,347	1,480	1,510	3,300	3,413
OUTLAYS: ON-BUDGET AND OFF-BUDGET	851,781	946,316	989,815	1,015,572	1,024,328
National defense	227,413	252,748	273,375	282,246	297,550
International affairs	15,876	16,176	14,152	14,607	15,209
General science, space, and technology	8,317	8,627	8,976	9,523	11,439
Energy	7,086	5,685	4,735	3,787	3,344
Natural resources and environment	12,593	13,357	13,639	13,857	14,241
Agriculture	13,613	25,565	31,449	31,084	26,333
Commerce and housing credit	6,917	4,229	4,448	9,300	2,533
Transportation	23,669	25,838	28,117	27,017	25,523
Community and regional development	7,673	7,680	7,233	6,167	5,463
Education, training, employment, and social services	27,579	29,342	30,585	29,808	28,429
Health	30,417	33,542	35,936	39,665	38,865
Medicare	57,540	65,822	70,164	71,614	73,032
Income security	112,668	128,200	119,796	124,905	124,784
Social security	178,223	188,623	198,757	207,865	219,388
On-budget	7,056	5,189	8,072	5,008	4,882
Off-budget	171,167	183,434	190,684	202,857	214,506
Veterans benefits and services	25,614	26,291	26,356	26,679	27,160
Administration of justice	5,660	6,277	6,603	8,293	9,170
General government	5,053	5,228	6,102	6,840	7,528
General purpose fiscal assistance	6,770	6,353	6,431	1,944	1,475
Net interest	111,058	129,430	135,969	137,461	139,032
On-budget	114,368	133,548	140,298	142,544	145,626
Off-budget	–3,310	–4,118	–4,329	–5,084	–6,594
Allowances	....	....	....	....	–770
Undistributed offsetting receipts	–31,957	–32,698	–33,007	–37,091	–45,399
On-budget	–29,913	–30,189	–30,150	–33,816	–39,915
Off-budget	–2,044	–2,509	–2,857	–3,275	–5,484

Note.—Through fiscal year 1976, the fiscal year was on a July 1–June 30 basis. Beginning October 1976 (fiscal year 1977), the fiscal year is on an October 1–September 30 basis. The 3-month period from July 1, 1976 through September 30, 1976 is a separate fiscal period known as the transition quarter.

Refunds of receipts are excluded from receipts and outlays.

See "Budget of the United States Government, Fiscal Year 1988" for additional information.

Sources: Department of the Treasury and Office of Management and Budget.

TABLE B–75.—*Relation of Federal Government receipts and expenditures in the national income and product accounts to the budget, fiscal years 1986–88*

[Billions of dollars; fiscal years]

Receipts and expenditures	1986	Estimate	
		1987	1988
RECEIPTS			
Total on-budget and off-budget receipts	769.1	842.4	916.6
Government contributions for employee retirement (grossing)	33.8	35.8	41.5
Other netting and grossing	12.3	13.5	17.7
Timing adjustments	.8	−15.6	−6.1
Geographic exclusions	−1.4	−1.5	−1.7
Federal sector, national income and product accounts, receipts	814.7	874.6	968.1
EXPENDITURES			
Total on-budget and off-budget outlays	989.8	1,015.6	1,024.3
Lending and financial transactions	−12.5	−6.3	4.5
Government contributions for employee retirement (grossing)	33.8	35.8	41.5
Other netting and grossing	12.3	13.5	17.7
Defense timing adjustment	3.2	6.5	3.9
Bonuses on Outer Continental Shelf land leases	2.0	1.3	.8
Geographic exclusions	−5.4	−5.6	−5.5
Other	2.0	−.4	1.5
Federal sector, national income and product accounts, expenditures	1,025.4	1,060.5	1,088.6

Note.—See Note, Table B–73.

See Special Analysis B, "Special Analyses, Budget of the United States Government, Fiscal Year 1988" for description of these categories.

Sources: Department of Commerce (Bureau of Economic Analysis), Department of the Treasury, and Office of Management and Budget.

TABLE B–76.—*Federal and State and local government receipts and expenditures, national income and product accounts, 1929–86*

[Billions of dollars; quarterly data at seasonally adjusted annual rates]

Year or quarter	Total government			Federal Government			State and local government		
	Receipts	Expenditures	Surplus or deficit (−), national income and product accounts	Receipts	Expenditures	Surplus or deficit (−), national income and product accounts	Receipts	Expenditures	Surplus or deficit (−), national income and product accounts
1929	11.3	10.3	1.0	3.8	2.7	1.2	7.6	7.8	−0.2
1933	9.4	10.7	−1.4	2.7	4.0	−1.3	7.2	7.2	−.1
1939	15.4	17.6	−2.2	6.8	9.0	−2.2	9.6	9.6	.0
1940	17.8	18.5	−.7	8.7	10.0	−1.3	10.0	9.3	.6
1941	25.0	28.8	−3.8	15.5	20.5	−5.1	10.4	9.1	1.3
1942	32.7	64.1	−31.4	23.0	56.1	−33.1	10.6	8.8	1.8
1943	49.2	93.4	−44.2	39.3	85.9	−46.6	10.9	8.4	2.4
1944	51.2	103.1	−51.8	41.1	95.6	−54.5	11.1	8.5	2.7
1945	53.4	92.9	−39.5	42.7	84.7	−42.1	11.6	9.0	2.6
1946	52.6	47.2	5.4	40.7	37.2	3.5	13.0	11.1	1.9
1947	57.8	43.4	14.4	44.1	30.8	13.4	15.4	14.4	1.0
1948	59.6	51.1	8.4	43.9	35.5	8.3	17.7	17.6	.1
1949	56.6	60.0	−3.4	39.4	42.0	−2.6	19.5	20.2	−.7
1950	69.4	61.4	8.0	50.4	41.2	9.2	21.3	22.5	−1.2
1951	85.6	79.5	6.1	64.6	58.1	6.5	23.4	23.9	−.4
1952	90.5	94.3	−3.8	67.7	71.4	−3.7	25.4	25.5	−.0
1953	95.0	102.0	−7.0	70.4	77.6	−7.1	27.4	27.3	.1
1954	90.4	97.5	−7.1	64.2	70.3	−6.0	29.0	30.2	−1.1
1955	101.6	98.5	3.1	73.1	68.6	4.4	31.7	32.9	−1.3
1956	110.2	105.0	5.2	78.5	72.5	6.1	35.0	35.9	−.9
1957	116.7	115.8	.9	82.5	80.2	2.3	38.5	39.8	−1.4
1958	115.7	128.3	−12.6	79.3	89.6	−10.3	42.0	44.4	−2.4
1959	130.3	131.9	−1.6	90.6	91.7	−1.1	46.6	47.0	−.4
1960	140.4	137.3	3.1	96.9	93.9	3.0	50.0	49.9	.1
1961	145.9	150.1	−4.3	99.0	102.9	−3.9	54.1	54.5	−.4
1962	157.9	161.6	−3.8	107.2	111.4	−4.2	58.6	58.2	.5
1963	169.8	169.1	.7	115.6	115.3	.3	63.4	62.9	.5
1964	175.6	177.8	−2.3	116.2	119.5	−3.3	69.8	68.8	1.0
1965	190.2	189.6	.5	125.8	125.3	.5	75.5	75.5	−.0
1966	214.4	215.6	−1.3	143.5	145.3	−1.8	85.2	84.7	.5
1967	230.8	245.0	−14.2	152.6	165.8	−13.2	94.1	95.2	−1.1
1968	266.2	272.2	−6.0	176.9	182.9	−6.0	107.9	107.8	.1
1969	300.1	290.2	9.9	199.7	191.3	8.4	120.8	119.3	1.5
1970	306.8	317.4	−10.6	195.4	207.8	−12.4	135.8	134.0	1.8
1971	327.3	346.8	−19.5	202.7	224.8	−22.0	153.6	151.0	2.6
1972	374.0	377.3	−3.4	232.2	249.0	−16.8	179.3	165.8	13.5
1973	419.6	411.7	7.9	263.7	269.3	−5.6	196.4	182.9	13.5
1974	463.1	467.4	−4.3	293.9	305.5	−11.6	213.1	205.9	7.2
1975	480.0	544.9	−64.9	294.9	364.2	−69.4	239.6	235.2	4.5
1976	549.1	587.5	−38.4	340.1	393.7	−53.5	270.1	254.9	15.2
1977	616.6	635.7	−19.1	384.1	430.1	−46.0	300.1	273.2	26.9
1978	694.4	694.8	−.4	441.4	470.7	−29.3	330.3	301.3	28.9
1979	779.8	768.3	11.5	505.0	521.1	−16.1	355.3	327.7	27.6
1980	855.1	889.6	−34.5	553.8	615.1	−61.3	390.0	363.2	26.8
1981	977.2	1,006.9	−29.7	639.5	703.3	−63.8	425.6	391.4	34.1
1982	1,000.8	1,111.6	−110.8	635.3	781.2	−145.9	449.4	414.3	35.1
1983	1,061.3	1,189.9	−128.6	659.9	835.9	−176.0	487.7	440.2	47.5
1984	1,173.7	1,275.2	−101.5	726.5	896.5	−170.0	540.8	472.4	68.5
1985	1,265.4	1,401.7	−136.3	786.8	984.9	−198.0	577.5	515.8	61.7
1986 ^{p}	1,341.0	1,484.1	−143.1	826.2	1,030.2	−204.0	618.8	557.9	60.8
1982: IV	1,008.4	1,175.3	−166.8	633.1	835.7	−202.6	459.8	424.1	35.8
1983: IV	1,095.3	1,208.2	−112.9	675.5	844.7	−169.2	505.8	449.5	56.4
1984: I	1,146.1	1,233.6	−87.5	711.2	865.2	−154.0	526.5	460.0	66.5
II	1,167.0	1,260.9	−93.9	721.7	885.6	−163.9	538.8	468.7	70.0
III	1,179.5	1,284.3	−104.8	729.2	901.1	−171.9	542.9	475.8	67.2
IV	1,202.2	1,322.1	−119.9	743.9	934.0	−190.1	555.3	485.0	70.2
1985: I	1,258.8	1,355.4	−96.6	793.3	955.4	−162.2	561.3	495.6	65.6
II	1,229.3	1,385.0	−155.6	755.8	970.6	−214.8	571.9	512.6	59.2
III	1,276.6	1,414.5	−138.0	792.6	990.1	−197.5	584.2	524.7	59.5
IV	1,296.9	1,452.0	−155.1	805.8	1,023.4	−217.6	592.7	530.2	62.5
1986: I	1,311.4	1,436.5	−125.1	806.6	1,001.5	−195.0	608.3	538.5	69.9
II	1,318.1	1,491.4	−173.3	813.5	1,045.7	−232.2	611.5	552.6	58.9
III	1,354.2	1,487.5	−133.3	833.1	1,030.5	−197.4	629.1	565.1	64.0
IV ^{p}	......	1,520.8	......	......	1,043.0	......	......	575.5	......

Note.—Federal grants-in-aid to State and local governments are reflected in Federal expenditures and State and local receipts. Total government receipts and expenditures have been adjusted to eliminate this duplication.

Source: Department of Commerce, Bureau of Economic Analysis.

TABLE B-77.—*Federal and State and local government receipts and expenditures, national income and product accounts, by major type, 1929–86*

[Billions of dollars; quarterly data at seasonally adjusted annual rates]

Year or quarter	Receipts					Expenditures								Surplus or deficit (−), national income and product accounts	Addendum: Grants-in-aid to State and local governments
	Total	Personal tax and nontax receipts	Corporate profits tax accruals	Indirect business tax and nontax accruals	Contributions for social insurance	Total [1]	Purchases of goods and services	Transfer payments	Net interest paid			Less: Dividends received by government	Subsidies less current surplus of government enterprises		
									Total	Interest paid	Less: Interest received by government				
1929	11.3	2.6	1.4	7.1	0.3	10.3	8.9	1.0	0.7	....	....	....	−0.2	1.0	0.1
1933	9.4	1.4	.5	7.1	.3	10.7	8.3	1.5	1.0	....	....	....	.0	−1.4	.5
1939	15.4	2.4	1.4	9.4	2.2	17.6	13.6	2.6	1.1	....	....	....	.4	−2.2	1.0
1940	17.8	2.6	2.8	10.1	2.4	18.5	14.2	2.7	1.2	....	....	....	.4	−.7	.9
1941	25.0	3.3	7.6	11.3	2.8	28.8	25.0	2.6	1.2	....	....	....	.1	−3.8	.8
1942	32.7	5.9	11.4	11.8	3.5	64.1	59.9	2.7	1.4	....	....	....	.1	−31.4	.9
1943	49.2	17.8	14.1	12.8	4.6	93.4	88.9	2.4	1.9	....	....	....	.1	−44.2	.9
1944	51.2	18.9	12.9	14.2	5.2	103.1	97.1	3.0	2.4	....	....	....	.6	−51.8	.9
1945	53.4	20.8	10.7	15.5	6.3	92.9	83.0	6.0	3.2	....	....	....	.7	−39.5	.9
1946	52.6	18.7	9.1	17.1	7.7	47.2	29.1	13.1	4.1	....	....	....	.9	5.4	1.1
1947	57.8	21.4	11.3	18.4	6.7	43.4	26.4	13.1	4.2	....	....	....	−.2	14.4	1.7
1948	59.6	21.0	12.4	20.1	6.0	51.1	32.6	14.5	4.2	....	....	....	−.1	8.4	2.0
1949	56.6	18.5	10.2	21.3	6.6	60.0	39.0	16.9	4.3	....	....	....	−.3	−3.4	2.2
1950	69.4	20.6	17.9	23.4	7.4	61.4	38.8	18.0	4.4	....	....	....	.1	8.0	2.3
1951	85.6	28.9	22.6	25.3	8.8	79.5	60.4	14.8	4.5	....	....	....	−.1	6.1	2.5
1952	90.5	34.0	19.4	27.7	9.3	94.3	75.8	14.3	4.5	....	....	....	−.3	−3.8	2.6
1953	95.0	35.5	20.3	29.7	9.6	102.0	82.8	15.1	4.6	....	....	....	−.5	−7.0	2.8
1954	90.4	32.5	17.6	29.6	10.6	97.5	76.0	17.1	4.7	....	....	....	−.3	−7.1	2.9
1955	101.6	35.4	22.0	32.2	12.0	98.5	75.3	18.5	4.7	....	....	....	.0	3.1	3.1
1956	110.2	39.7	22.0	35.0	13.5	105.0	79.7	19.4	5.2	....	....	....	.7	5.2	3.3
1957	116.7	42.4	21.4	37.4	15.5	115.8	87.3	22.2	5.6	....	....	....	.7	.9	4.2
1958	115.7	42.2	19.0	38.6	15.9	128.3	95.4	26.5	5.4	....	....	....	1.1	−12.6	5.6
1959	130.3	46.1	23.6	41.7	18.8	131.9	97.9	27.6	6.3	....	....	....	.1	1.6	6.8
1960	140.4	50.5	22.7	45.3	21.9	137.3	100.6	29.4	6.9	10.1	3.3	....	.4	3.1	6.5
1961	145.9	52.2	22.8	48.0	22.9	150.1	108.4	33.7	6.4	9.9	3.5	....	1.7	−4.3	7.2
1962	157.9	57.0	24.0	51.5	25.4	161.6	118.2	34.8	6.9	10.8	3.9	....	1.8	−3.8	8.0
1963	169.8	60.5	26.2	54.6	28.5	169.1	123.8	36.8	7.4	11.6	4.2	....	1.1	.7	9.1
1964	175.6	58.8	28.0	58.7	30.1	177.8	130.0	38.3	7.9	12.5	4.6	....	1.7	−2.3	10.4
1965	190.2	65.2	30.9	62.5	31.6	189.6	138.6	41.3	8.1	13.2	5.1	....	1.6	.5	11.1
1966	214.4	74.9	33.7	65.2	40.6	215.6	158.6	46.0	8.5	14.5	6.0	....	2.5	−1.3	14.4
1967	230.8	82.4	32.7	70.1	45.5	245.0	179.7	54.7	8.9	15.7	6.8	....	1.6	−14.2	15.9
1968	266.2	97.7	39.4	78.7	50.4	272.2	197.7	62.9	10.3	18.1	7.7	0.1	1.4	−6.0	18.6
1969	300.1	116.3	39.7	86.3	57.9	290.2	207.3	69.7	11.5	19.8	8.3	.2	1.9	9.9	20.3
1970	306.8	116.2	34.4	94.0	62.2	317.4	218.2	84.1	12.4	22.3	9.9	.2	2.9	−10.6	24.4
1971	327.3	117.3	37.7	103.4	68.9	346.8	232.4	99.8	12.5	23.1	10.6	.3	2.6	−19.5	29.0
1972	374.0	142.0	41.9	111.1	79.0	377.3	250.0	111.3	12.9	24.8	11.9	.3	3.7	−3.4	37.5
1973	419.6	152.0	49.3	120.8	97.6	411.7	266.5	127.0	15.2	29.6	14.3	.5	3.5	7.9	40.6
1974	463.1	171.8	51.8	129.0	110.5	467.4	299.1	150.9	16.5	33.6	17.1	.9	1.2	−4.3	43.9
1975	480.0	170.6	50.9	140.0	118.5	544.9	335.0	189.6	18.8	37.7	18.9	.9	2.4	−64.9	54.6
1976	549.1	198.7	64.2	151.7	134.5	587.5	356.9	207.2	23.2	43.6	20.4	.9	1.0	−38.4	61.1
1977	616.6	228.1	73.0	165.7	149.8	635.7	387.3	221.6	25.1	47.9	22.8	1.3	3.0	−19.1	67.5
1978	694.4	261.1	83.5	178.1	171.7	694.8	425.2	239.5	28.2	56.5	28.3	1.7	3.9	−.4	77.3
1979	779.8	304.7	88.0	189.4	197.8	768.3	467.8	268.0	30.8	68.2	37.5	2.0	3.5	11.5	80.5
1980	855.1	340.5	84.8	213.3	216.5	889.6	530.3	319.2	36.3	83.2	46.9	1.9	5.7	−34.5	88.7
1981	977.2	393.3	81.1	251.5	251.2	1,006.9	588.1	362.2	52.2	109.1	56.9	2.3	6.7	−29.7	87.9
1982	1,000.8	409.3	63.1	258.8	269.6	1,111.6	641.7	404.0	60.1	128.3	68.1	2.9	8.7	−110.8	83.9
1983	1,061.3	410.5	77.2	282.6	291.0	1,189.9	675.0	435.1	68.1	145.1	77.1	2.8	14.1	−128.6	86.2
1984	1,173.7	439.6	95.4	312.0	326.7	1,275.2	733.4	448.1	87.1	173.3	86.3	3.6	10.5	−101.5	93.6
1985	1,265.4	486.5	91.8	331.4	355.7	1,401.7	815.4	479.5	103.6	194.7	91.1	5.2	8.2	−136.3	99.0
1986 *p*	1,341.0	513.4	102.8	348.7	376.1	1,484.1	865.3	504.2	109.8	206.4	96.6	6.6	11.3	−143.1	104.0
1982: IV	1,008.4	411.1	59.8	264.5	273.0	1,175.3	671.8	429.7	61.4	133.2	71.8	3.1	15.4	−166.8	84.5
1983: IV	1,095.3	413.9	88.1	294.1	299.2	1,208.2	676.1	441.1	74.2	154.7	80.5	2.9	19.6	−112.9	86.0
1984: I	1,146.1	421.5	102.9	302.9	318.8	1,233.6	693.2	441.4	79.3	162.4	83.2	3.1	23.0	−87.5	91.5
II	1,167.0	431.2	101.6	310.3	323.9	1,260.9	733.3	445.0	81.6	167.8	86.1	3.4	4.5	−93.9	93.4
III	1,179.5	445.9	89.3	315.3	329.0	1,284.3	743.8	448.8	90.9	178.1	87.2	3.8	4.5	−104.8	92.6
IV	1,202.2	460.0	87.8	319.6	334.9	1,322.1	763.4	457.0	96.4	184.9	88.4	4.2	10.0	−119.9	96.9
1985: I	1,258.8	497.7	87.8	323.3	350.0	1,355.4	777.3	470.5	99.9	189.0	89.1	4.6	12.5	−96.6	95.7
II	1,229.3	456.4	87.1	331.9	353.9	1,385.0	799.0	475.9	103.8	193.8	90.0	5.0	10.2	−155.6	98.3
III	1,276.6	491.2	95.8	332.7	356.8	1,414.5	829.7	484.4	103.2	195.7	92.5	5.4	2.6	−138.0	100.2
IV	1,296.9	500.7	96.4	337.7	362.1	1,452.0	855.6	487.3	107.5	200.4	92.9	5.7	7.4	−155.1	101.6
1986: I	1,311.4	497.5	95.7	346.7	371.5	1,436.5	836.7	492.9	109.0	204.0	95.0	6.1	4.1	−125.1	103.5
II	1,318.1	504.8	99.0	340.8	373.5	1,491.4	860.8	502.3	112.4	207.8	95.5	6.4	22.4	−173.3	106.9
III	1,354.2	519.0	104.4	354.2	376.6	1,487.5	874.0	510.5	108.8	206.9	98.1	6.8	1.0	−133.3	108.0
IV *p*	....	532.2	....	353.1	382.6	1,520.8	889.7	511.3	109.2	206.9	97.8	7.0	17.8	....	97.7

[1] Includes an item for the difference between wage accruals and disbursements, not shown separately.

Source: Department of Commerce, Bureau of Economic Analysis.

TABLE B–78.—*Federal Government receipts and expenditures, national income and product accounts, 1966–88*

[Billions of dollars; quarterly data at seasonally adjusted annual rates]

Year or quarter	Receipts					Expenditures								Surplus or deficit (−), national income and product accounts
	Total	Personal tax and nontax receipts	Corporate profits tax accruals	Indirect business tax and nontax accruals	Contributions for social insurance	Total[1]	Purchases of goods and services		Transfer payments		Grants-in-aid to State and local governments	Net interest paid	Subsidies less current surplus of government enterprises	
							Total	National defense	To persons	To foreigners				
Fiscal: [2]														
1966	134.0	57.5	30.8	15.4	30.2	134.3	73.9	55.7	31.8	2.4	12.7	8.7	4.8	−0.3
1967	148.1	64.4	30.3	15.7	37.7	156.7	87.6	68.8	37.2	2.3	14.8	9.6	5.2	−8.6
1968	162.1	71.4	33.1	17.0	40.6	174.4	97.0	77.0	42.9	2.2	17.8	10.4	4.1	−12.3
1969	192.5	90.2	36.8	18.6	46.9	187.3	100.3	78.5	48.9	2.3	19.2	12.0	4.7	5.2
1970	198.0	94.0	32.9	19.1	52.0	198.7	99.8	78.2	55.3	2.2	22.6	13.5	5.5	−.7
1971	196.2	87.9	31.9	20.0	56.5	216.8	98.3	75.7	68.1	2.5	26.8	14.1	7.0	−20.5
1972	217.9	100.5	34.2	19.8	63.4	237.1	104.4	76.2	76.5	3.0	32.6	14.0	6.5	−19.2
1973	245.3	107.5	40.9	20.6	76.3	260.4	105.3	77.1	87.6	2.8	40.4	15.7	9.1	−15.2
1974	277.2	122.7	43.4	21.3	89.8	283.9	109.3	78.8	102.3	3.2	41.6	19.6	7.7	−6.8
1975	290.5	127.5	42.1	22.1	98.8	335.7	123.9	86.3	131.9	3.7	48.4	21.7	5.9	−45.3
1976	322.6	137.1	52.1	24.2	109.1	378.9	132.2	91.5	154.3	3.7	57.5	25.1	6.2	−56.3
1977	374.7	165.9	59.0	24.5	125.4	419.6	146.8	99.2	167.1	4.1	66.3	28.5	6.9	−44.8
1978	424.3	186.5	67.8	27.1	142.9	459.9	158.6	106.3	179.3	4.4	74.7	33.5	9.7	−35.6
1979	491.2	222.9	75.7	29.0	163.6	506.4	173.1	117.7	198.5	5.1	79.1	40.7	9.9	−15.2
1980	538.6	250.7	70.2	35.3	182.3	589.0	199.9	137.2	235.4	5.8	86.7	50.8	10.4	−50.4
1981	623.8	289.6	69.4	53.4	211.4	682.4	231.8	160.7	274.6	6.7	90.1	66.7	12.5	−58.5
1982	643.3	310.0	52.1	50.0	231.1	755.9	264.4	187.3	305.6	7.2	83.4	82.2	13.0	−112.6
1983	645.7	292.5	55.7	50.2	247.3	832.4	287.4	210.4	339.8	7.7	85.7	90.6	20.9	−186.7
1984	712.6	302.4	76.3	54.9	279.0	873.9	297.8	229.1	342.3	9.9	90.7	109.7	23.5	−161.3
1985	774.6	340.2	71.7	56.5	306.2	962.1	341.1	253.6	360.8	13.4	97.7	128.3	20.9	−187.5
1986	814.7	355.8	83.0	52.2	323.7	1,025.4	367.1	274.8	380.4	13.8	107.4	136.8	19.9	−210.7
1987 [3]	874.6	368.7	108.9	53.8	343.2	1,060.5	384.8	291.0	395.3	14.2	104.6	138.5	25.1	−185.9
1988 [3]	968.1	396.5	130.2	56.6	384.8	1,088.6	394.8	301.0	412.9	14.3	100.0	140.5	26.1	−120.5
Calendar:														
1966	143.5	61.7	31.4	15.5	34.9	145.3	80.4	62.0	33.5	2.4	14.4	9.2	5.5	−1.8
1967	152.6	67.5	30.0	16.2	38.9	165.8	92.7	73.4	40.2	2.4	15.9	9.8	4.7	−13.2
1968	176.9	79.7	36.1	17.9	43.2	182.9	100.1	79.1	46.2	2.3	18.6	11.3	4.5	−6.0
1969	199.7	95.1	36.1	18.9	49.6	191.3	100.0	78.9	50.8	2.2	20.3	12.7	5.2	8.4
1970	195.4	92.6	30.6	19.2	52.9	207.8	98.8	76.8	61.6	2.3	24.4	14.1	6.5	−12.4
1971	202.7	90.3	33.5	20.3	58.7	224.8	99.8	74.1	73.0	2.7	29.0	13.8	6.3	−22.0
1972	232.2	108.2	36.6	19.9	67.5	249.0	105.8	77.4	80.9	2.9	37.5	14.4	7.9	−16.8
1973	263.7	114.7	43.3	21.1	84.6	269.3	106.4	77.5	93.7	2.9	40.6	18.0	7.8	−5.6
1974	293.9	131.3	45.1	21.6	95.9	305.5	116.2	82.6	115.0	3.6	43.9	20.7	5.6	−11.6
1975	294.9	125.9	43.6	23.8	101.6	364.2	129.2	89.6	146.8	4.0	54.6	23.0	6.9	−69.4
1976	340.1	147.3	54.6	23.3	115.0	393.7	136.3	93.4	159.3	4.4	61.1	26.8	5.8	−53.5
1977	384.1	169.8	61.6	25.0	127.7	430.1	151.1	100.9	170.1	4.2	67.5	29.1	8.2	−46.0
1978	441.4	194.9	71.4	28.0	147.0	470.7	161.8	108.9	182.4	4.7	77.3	35.2	9.5	−29.3
1979	505.0	231.0	74.4	29.3	170.3	521.1	178.0	121.9	205.6	5.2	80.5	42.5	9.2	−16.1
1980	553.8	257.9	70.3	38.8	186.8	615.1	208.1	142.7	247.0	6.5	88.7	53.3	11.5	−61.3
1981	639.5	298.9	65.7	56.2	218.8	703.3	242.2	167.5	282.1	6.5	87.9	72.4	12.3	−63.8
1982	635.3	304.5	49.0	48.1	233.7	781.2	272.7	193.8	316.3	7.8	83.9	84.6	16.0	−145.9
1983	659.9	294.5	61.3	51.6	252.5	835.9	283.5	214.4	340.1	8.5	86.2	94.3	22.9	−176.0
1984	726.5	309.3	75.9	55.7	285.5	896.5	311.3	235.0	344.3	10.7	93.6	115.6	21.3	−170.0
1985	786.8	345.6	73.6	56.1	311.5	984.9	354.1	259.4	367.0	13.4	99.0	130.5	20.7	−198.0
1986 [p]	826.2	361.8	83.2	52.3	328.9	1,030.2	367.2	278.4	383.8	13.7	104.0	135.8	25.6	−204.0
1982: IV	633.1	303.0	46.4	47.6	236.1	835.7	293.2	205.4	337.9	9.5	84.5	87.2	23.4	−202.6
1983: IV	675.5	291.9	70.2	53.6	259.8	844.7	276.1	221.5	340.3	12.2	86.0	101.0	29.1	−169.2
1984: I	711.2	295.9	81.9	54.6	278.8	865.2	283.4	227.1	342.1	8.1	91.5	107.3	32.9	−154.0
II	721.7	301.7	80.9	55.8	283.3	885.6	315.2	233.7	343.4	8.3	93.4	110.4	15.0	−163.9
III	729.2	314.3	71.0	56.3	287.6	901.1	317.2	234.5	345.0	11.1	92.6	119.7	15.6	−171.9
IV	743.9	325.5	69.9	55.9	292.6	934.0	329.1	244.9	346.7	15.5	96.9	124.9	21.5	−190.1
1985: I	793.3	360.7	70.5	55.1	306.9	955.4	333.7	248.9	363.1	11.1	95.7	127.6	24.4	−162.2
II	755.8	316.6	69.9	59.3	310.0	970.6	340.9	255.1	364.7	12.4	98.3	130.9	22.3	−214.8
III	792.6	349.6	76.8	53.9	312.2	990.1	360.9	265.5	369.6	14.5	100.2	129.8	15.1	−197.5
IV	805.8	355.6	77.2	56.0	317.0	1,023.4	380.9	268.0	370.4	15.4	101.6	133.9	21.1	−217.6
1986: I	806.6	350.3	77.8	52.7	325.8	1,001.5	355.7	266.4	378.8	10.5	103.5	135.0	18.0	−195.0
II	813.5	355.5	80.1	50.7	327.2	1,045.7	367.6	278.4	381.6	15.0	106.9	138.1	36.5	−232.2
III	833.1	365.8	84.3	53.4	329.6	1,030.5	369.3	286.8	387.5	15.5	108.0	134.7	15.4	−197.4
IV [p]	....	375.6	....	52.5	333.1	1,043.0	376.3	281.9	387.4	13.6	97.7	135.4	32.5	....

[1] Includes an item for the difference between wage accruals and disbursements, not shown separately.

[2] Through fiscal year 1976, the fiscal year was on a July 1–June 30 basis; beginning October 1976 (fiscal year 1977), the fiscal year is on an October 1–September 30 basis. The 3-month period from July 1, 1976 through September 30, 1976 is a separate fiscal period known as the transition quarter.

[3] Estimates.

Sources: Department of Commerce (Bureau of Economic Analysis) and Office of Management and Budget.

TABLE B-79.—*State and local government receipts and expenditures, national income and product accounts, 1946–86*

[Billions of dollars; quarterly data at seasonally adjusted annual rates]

Year or quarter	Receipts						Expenditures					Surplus or deficit (−), national income and product accounts
	Total	Personal tax and nontax receipts	Corporate profits tax accruals	Indirect business tax and nontax accruals	Contributions for social insurance	Federal grants-in-aid	Total[1]	Purchases of goods and services	Transfer payments to persons	Net interest paid less dividends received	Subsidies less current surplus of government enterprises	
1946	13.0	1.5	0.5	9.3	0.6	1.1	11.1	9.9	1.7	0.2	−0.7	1.9
1947	15.4	1.7	.6	10.7	.7	1.7	14.4	12.8	2.3	.1	−.8	1.0
1948	17.7	2.1	.7	12.2	.8	2.0	17.6	15.3	3.0	.1	−.8	.1
1949	19.5	2.4	.6	13.3	.9	2.2	20.2	18.0	3.0	.1	−.9	−.7
1950	21.3	2.5	.8	14.6	1.1	2.3	22.5	19.8	3.6	.1	−.9	−1.2
1951	23.4	2.8	.9	15.9	1.4	2.5	23.9	21.8	3.1	.0	−1.0	−.4
1952	25.4	3.0	.8	17.4	1.6	2.6	25.5	23.1	3.5	.0	−1.1	.0
1953	27.4	3.2	.8	18.8	1.7	2.8	27.3	24.8	3.6	.0	−1.2	.1
1954	29.0	3.5	.8	19.9	2.0	2.9	30.2	27.7	3.8	.1	−1.3	−1.1
1955	31.7	3.9	1.0	21.6	2.1	3.1	32.9	30.3	4.0	.1	−1.5	−1.3
1956	35.0	4.5	1.0	23.8	2.3	3.3	35.9	33.3	4.2	.1	−1.6	−.9
1957	38.5	5.0	1.0	25.7	2.6	4.2	39.8	36.9	4.6	.1	−1.7	−1.4
1958	42.0	5.4	1.0	27.2	2.8	5.6	44.4	40.8	5.1	.1	−1.7	−2.4
1959	46.6	6.2	1.2	29.3	3.1	6.8	47.0	43.3	5.6	.1	−2.0	−.4
1960	50.0	6.8	1.2	32.0	3.4	6.5	49.9	46.1	5.9	.1	−2.2	.1
1961	54.1	7.5	1.3	34.4	3.7	7.2	54.5	50.2	6.5	.1	−2.3	−.4
1962	58.6	8.4	1.5	37.0	3.9	8.0	58.2	53.5	7.0	.2	−2.5	.5
1963	63.4	9.0	1.7	39.4	4.2	9.1	62.9	58.1	7.5	.1	−2.8	.5
1964	69.8	10.2	1.8	42.6	4.7	10.4	68.8	63.5	8.2	−.1	−2.8	1.0
1965	75.5	11.3	2.0	46.1	5.0	11.1	75.5	69.9	8.8	−.3	−3.0	.0
1966	85.2	13.2	2.2	49.7	5.7	14.4	84.7	78.2	10.1	−.6	−3.0	.5
1967	94.1	15.0	2.6	53.9	6.7	15.9	95.2	87.0	12.1	−.9	−3.1	−1.1
1968	107.9	18.0	3.3	60.8	7.2	18.6	107.8	97.6	14.5	−1.1	−3.2	.1
1969	120.8	21.1	3.6	67.4	8.3	20.3	119.3	107.2	16.7	−1.3	−3.3	1.5
1970	135.8	23.6	3.7	74.8	9.2	24.4	134.0	119.4	20.1	−2.0	−3.6	1.8
1971	153.6	27.0	4.3	83.1	10.2	29.0	151.0	132.5	24.0	−1.6	−3.7	2.6
1972	179.3	33.8	5.3	91.2	11.5	37.5	165.8	144.2	27.5	−1.8	−4.2	13.5
1973	196.4	37.3	6.0	99.6	13.0	40.6	182.9	160.1	30.4	−3.3	−4.3	13.5
1974	213.1	40.5	6.7	107.4	14.6	43.9	205.9	182.9	32.3	−5.0	−4.4	7.2
1975	239.6	44.7	7.3	116.2	16.8	54.6	235.2	205.9	38.9	−5.1	−4.5	4.5
1976	270.1	51.5	9.6	128.4	19.5	61.1	254.9	220.6	43.6	−4.5	−4.8	15.2
1977	300.1	58.3	11.4	140.7	22.1	67.5	273.2	236.2	47.4	−5.3	−5.1	26.9
1978	330.3	66.2	12.1	150.0	24.7	77.3	301.3	263.4	52.4	−8.7	−5.6	28.9
1979	355.3	73.7	13.6	160.1	27.4	80.5	327.7	289.9	57.2	−13.8	−5.7	27.6
1980	390.0	82.6	14.5	174.5	29.7	88.7	363.2	322.2	65.7	−18.9	−5.8	26.8
1981	425.6	94.5	15.4	195.3	32.5	87.9	391.4	345.9	73.6	−22.4	−5.6	34.1
1982	449.4	104.9	14.0	210.8	35.8	83.9	414.3	369.0	79.9	−27.4	−7.3	35.1
1983	487.7	116.1	15.9	231.0	38.5	86.2	440.2	391.5	86.5	−29.0	−8.8	47.5
1984	540.8	130.3	19.5	256.3	41.1	93.6	472.4	422.2	93.1	−32.1	−10.7	68.5
1985	577.5	140.9	18.2	275.4	44.2	99.0	515.8	461.3	99.2	−32.1	−12.6	61.7
1986 ᵖ	618.8	151.6	19.6	296.4	47.1	104.0	557.9	498.1	106.7	−32.6	−14.3	60.8
1982: IV	459.8	108.1	13.4	216.9	36.9	84.5	424.1	378.7	82.3	−28.9	−8.0	35.8
1983: IV	505.8	122.0	17.9	240.5	39.4	86.0	449.5	400.0	88.7	−29.7	−9.4	56.4
1984: I	526.5	125.5	21.0	248.3	40.0	91.5	460.0	409.8	91.3	−31.2	−9.9	66.5
II	538.8	129.5	20.8	254.4	40.7	93.4	468.7	418.1	93.3	−32.2	−10.5	70.0
III	542.9	131.7	18.3	259.0	41.4	92.6	475.8	426.6	92.7	−32.6	−11.0	67.2
IV	555.3	134.4	18.0	263.7	42.3	96.9	485.0	434.3	94.9	−32.6	−11.5	70.2
1985: I	561.3	137.0	17.3	268.2	43.1	95.7	495.6	443.5	96.3	−32.3	−11.9	65.6
II	571.9	139.8	17.2	272.7	43.9	98.3	512.6	458.1	98.7	−32.1	−12.1	59.2
III	584.2	141.6	19.0	278.8	44.5	100.2	524.7	468.8	100.4	−32.0	−12.5	59.5
IV	592.7	145.1	19.2	281.8	45.1	101.6	530.2	474.7	101.4	−32.1	−13.7	62.5
1986: I	608.3	147.2	17.9	294.1	45.7	103.5	538.5	480.9	103.6	−32.2	−13.9	69.9
II	611.5	149.3	18.8	290.1	46.3	106.9	552.6	493.3	105.6	−32.2	−14.1	58.9
III	629.1	153.1	20.1	300.8	47.0	108.0	565.1	504.7	107.5	−32.7	−14.4	64.0
IV ᵖ	....	156.7	....	300.6	49.5	97.7	575.5	513.3	110.2	−33.3	−14.7	....

[1] Includes an item for the difference between wage accruals and disbursements, not shown separately.

Source: Department of Commerce, Bureau of Economic Analysis.

Table B–80.—*State and local government revenues and expenditures, selected fiscal years, 1927–85*

[Millions of dollars]

Fiscal year[1]	General revenues by source[2]							General expenditures by function[2]				
	Total	Property taxes	Sales and gross receipts taxes	Individual income taxes	Corporation net income taxes	Revenue from Federal Government	All other[3]	Total	Education	Highways	Public welfare	All other[4]
1927	7,271	4,730	470	70	92	116	1,793	7,210	2,235	1,809	151	3,015
1932	7,267	4,487	752	74	79	232	1,643	7,765	2,311	1,741	444	3,269
1934	7,678	4,076	1,008	80	49	1,016	1,449	7,181	1,831	1,509	889	2,952
1936	8,395	4,093	1,484	153	113	948	1,604	7,644	2,177	1,425	827	3,215
1938	9,228	4,440	1,794	218	165	800	1,811	8,757	2,491	1,650	1,069	3,547
1940	9,609	4,430	1,982	224	156	945	1,872	9,229	2,638	1,573	1,156	3,862
1942	10,418	4,537	2,351	276	272	858	2,123	9,190	2,586	1,490	1,225	3,889
1944	10,908	4,604	2,289	342	451	954	2,269	8,863	2,793	1,200	1,133	3,737
1946	12,356	4,986	2,986	422	447	855	2,661	11,028	3,356	1,672	1,409	4,591
1948	17,250	6,126	4,442	543	592	1,861	3,685	17,684	5,379	3,036	2,099	7,170
1950	20,911	7,349	5,154	788	593	2,486	4,541	22,787	7,177	3,803	2,940	8,867
1952	25,181	8,652	6,357	998	846	2,566	5,763	26,098	8,318	4,650	2,788	10,342
1953	27,307	9,375	6,927	1,065	817	2,870	6,252	27,910	9,390	4,987	2,914	10,619
1954	29,012	9,967	7,276	1,127	778	2,966	6,897	30,701	10,557	5,527	3,060	11,557
1955	31,073	10,735	7,643	1,237	744	3,131	7,584	33,724	11,907	6,452	3,168	12,197
1956	34,667	11,749	8,691	1,538	890	3,335	8,465	36,711	13,220	6,953	3,139	13,399
1957	38,164	12,864	9,467	1,754	984	3,843	9,252	40,375	14,134	7,816	3,485	14,940
1958	41,219	14,047	9,829	1,759	1,018	4,865	9,699	44,851	15,919	8,567	3,818	16,547
1959	45,306	14,983	10,437	1,994	1,001	6,377	10,516	48,887	17,283	9,592	4,136	17,876
1960	50,505	16,405	11,849	2,463	1,180	6,974	11,634	51,876	18,719	9,428	4,404	19,325
1961	54,037	18,002	12,463	2,613	1,266	7,131	12,563	56,201	20,574	9,844	4,720	21,063
1962	58,252	19,054	13,494	3,037	1,308	7,871	13,489	60,206	22,216	10,357	5,084	22,549
1963	62,890	20,089	14,456	3,269	1,505	8,722	14,850	64,816	23,776	11,136	5,481	24,423
1962–63	62,269	19,833	14,446	3,267	1,505	8,663	14,556	63,977	23,729	11,150	5,420	23,678
1963–64	68,443	21,241	15,762	3,791	1,695	10,002	15,951	69,302	26,286	11,664	5,766	25,586
1964–65	74,000	22,583	17,118	4,090	1,929	11,029	17,250	74,678	28,563	12,221	6,315	27,579
1965–66	83,036	24,670	19,085	4,760	2,038	13,214	19,269	82,843	33,287	12,770	6,757	30,029
1966–67	91,197	26,047	20,530	5,825	2,227	15,370	21,197	93,350	37,919	13,932	8,218	33,281
1967–68	101,264	27,747	22,911	7,308	2,518	17,181	23,598	102,411	41,158	14,481	9,857	36,915
1968–69	114,550	30,673	26,519	8,908	3,180	19,153	26,118	116,728	47,238	15,417	12,110	41,963
1969–70	130,756	34,054	30,322	10,812	3,738	21,857	29,971	131,332	52,718	16,427	14,679	47,508
1970–71	144,927	37,852	33,233	11,900	3,424	26,146	32,374	150,674	59,413	18,095	18,226	54,940
1971–72	167,541	42,877	37,518	15,227	4,416	31,342	36,162	168,550	65,814	19,021	21,117	62,597
1972–73	190,214	45,283	42,047	17,994	5,425	39,256	40,210	181,357	69,714	18,615	23,582	69,446
1973–74	207,670	47,705	46,098	19,491	6,015	41,820	46,541	198,959	75,833	19,946	25,085	78,096
1974–75	228,171	51,491	49,815	21,454	6,642	47,034	51,735	230,721	87,858	22,528	28,155	92,180
1975–76	256,176	57,001	54,547	24,575	7,273	55,589	57,191	256,731	97,216	23,907	32,604	103,004
1976–77	285,157	62,527	60,641	29,246	9,174	62,444	61,124	274,215	102,780	23,058	35,906	112,472
1977–78	315,960	66,422	67,596	33,176	10,738	69,592	68,436	296,983	110,758	24,609	39,140	122,476
1978–79	343,278	64,944	74,247	36,932	12,128	75,164	79,864	327,517	119,448	28,440	41,898	137,731
1979–80	382,322	68,499	79,927	42,080	13,321	83,029	95,466	369,086	133,211	33,311	47,288	155,277
1980–81	423,404	74,969	85,971	46,426	14,143	90,294	111,599	407,449	145,784	34,603	54,121	172,941
1981–82	457,654	82,067	93,613	50,738	15,028	87,282	128,926	436,896	154,282	34,520	57,996	190,098
1982–83	486,878	89,253	100,247	55,129	14,258	89,983	138,009	466,421	163,876	36,655	60,484	205,406
1983–84	542,847	96,457	114,097	64,623	17,047	97,052	153,570	505,006	176,108	39,516	66,414	222,969
1984–85	597,719	103,757	126,281	70,097	19,158	106,193	172,233	554,161	192,686	45,022	71,532	244,921

[1] Fiscal years not the same for all governments. See Note.

[2] Excludes revenues or expenditures of publicly owned utilities and liquor stores, and of insurance-trust activities. Intergovernmental receipts and payments between State and local governments are also excluded.

[3] Includes other taxes and charges and miscellaneous revenues.

[4] Includes expenditures for libraries, hospitals, health, employment security administration, veterans' services, air transportation, water transport and terminals, parking facilities, and transit subsidies, police protection, fire protection, correction, protective inspection and regulation, sewerage, natural resources, parks and recreation, housing and community development, sanitation other than sewerage, financial administration, judicial and legal, general public buildings, other governmental administration, interest on general debt, and general expenditures, n.e.c.

Note.—Data for fiscal years listed from 1962–63 to 1983–84 are the aggregations of data for government fiscal years which ended in the 12-month period from July 1 to June 30 of those years. Data for 1963 and earlier years include data for government fiscal years ending during that particular calendar year.

Data are not available for intervening years.

Source: Department of Commerce, Bureau of the Census.

TABLE B–81.—*Interest-bearing public debt securities by kind of obligation, 1967–86*

[Millions of dollars]

End of year or month	Total [1] interest-bearing public debt securities	Marketable				Nonmarketable				
		Total [1]	Treasury bills	Treasury notes	Treasury bonds	Total	U.S. savings bonds	Foreign government and public series [2]	Government account series	Other [3]
Fiscal year:										
1967	322,286	[4] 210,672	58,535	49,108	97,418	111,614	51,213	1,514	56,155	2,731
1968	344,401	226,592	64,440	71,073	91,079	117,808	51,712	3,741	59,526	2,828
1969	351,729	226,107	68,356	78,946	78,805	125,623	51,711	4,070	66,790	3,051
1970	369,026	232,599	76,154	93,489	62,956	136,426	51,281	4,755	76,323	4,068
1971	396,289	245,473	86,677	104,807	53,989	150,816	53,003	9,270	82,784	5,759
1972	425,360	257,202	94,648	113,419	49,135	168,158	55,921	18,985	89,598	3,654
1973	456,353	262,971	100,061	117,840	45,071	193,382	59,418	28,524	101,738	3,701
1974	473,238	266,575	105,019	128,419	33,137	206,663	61,921	25,011	115,442	4,289
1975	532,122	315,606	128,569	150,257	36,779	216,516	65,482	23,216	124,173	3,644
1976	619,254	392,581	161,198	191,758	39,626	226,673	69,733	21,500	130,557	4,883
1977	697,629	443,508	156,091	241,692	45,724	254,121	75,411	21,799	140,113	16,797
1978	766,971	485,155	160,936	267,865	56,355	281,816	79,798	21,680	153,271	27,067
1979	819,007	506,693	161,378	274,242	71,073	312,314	80,440	28,115	176,360	27,400
1980	906,402	594,506	199,832	310,903	83,772	311,896	72,727	25,158	189,848	24,164
1981	996,495	683,209	223,388	363,643	96,178	313,286	68,017	20,499	201,052	23,718
1982	1,140,883	824,422	277,900	442,890	103,631	316,461	67,274	14,641	210,462	24,085
1983	1,375,751	1,024,000	340,733	557,525	125,742	351,751	70,024	11,450	234,684	35,593
1984	1,559,570	1,176,556	356,798	661,687	158,070	383,015	72,832	8,806	259,534	41,843
1985	1,821,010	1,360,179	384,220	776,449	199,510	460,831	77,011	6,638	313,928	63,255
1986	2,122,684	[1] 1,564,329	410,730	896,884	241,716	558,355	85,551	4,128	365,872	102,804
1985: Jan	1,677,785	1,259,416	374,471	712,778	172,168	418,369	73,336	9,378	290,527	45,127
Feb	1,696,188	1,274,909	376,760	719,762	178,387	421,279	73,724	8,598	293,292	45,664
Mar	1,695,223	1,271,670	379,477	713,836	178,357	423,554	74,089	9,087	292,219	48,159
Apr	1,730,666	1,300,895	379,851	738,455	182,589	429,771	74,534	8,840	297,355	49,043
May	1,751,838	1,314,308	381,220	745,124	187,963	437,531	74,992	7,663	302,536	52,339
June	1,759,826	1,310,712	381,872	740,910	187,930	449,114	75,426	8,333	310,995	54,359
July	1,798,912	1,343,550	384,462	766,677	192,411	455,362	75,927	8,147	313,956	57,332
Aug	1,806,905	1,347,763	387,345	760,882	199,537	459,142	76,490	7,153	314,849	60,648
Sept	1,821,010	1,360,179	384,220	776,449	199,510	460,831	77,011	6,638	313,928	63,255
Oct	1,829,885	[1] 1,375,619	389,716	777,687	199,470	454,265	77,536	7,156	302,625	66,948
Nov	1,888,844	[1] 1,411,469	397,561	788,611	211,103	477,375	78,115	7,036	319,425	72,799
Dec	1,943,402	[1] 1,437,653	399,893	812,488	211,078	505,749	78,073	7,527	332,174	87,975
1986: Jan	1,960,129	[1] 1,449,859	399,563	820,299	215,803	510,270	78,567	7,543	336,203	87,957
Feb	1,976,744	[1] 1,464,094	397,505	829,375	223,045	512,650	79,185	7,087	338,988	87,391
Mar	1,984,224	[1] 1,472,836	393,172	842,473	223,022	511,388	79,807	6,726	335,956	88,899
Apr	2,005,889	[1] 1,481,953	393,714	851,084	222,986	523,936	80,534	5,737	343,156	94,509
May	2,019,773	[1] 1,487,226	394,880	845,884	232,294	532,547	81,509	5,253	348,672	97,112
June	2,056,726	1,498,229	396,650	869,302	232,278	558,497	82,278	5,260	372,305	98,653
July	2,071,976	1,519,700	400,727	877,717	232,256	561,276	83,052	4,676	372,264	101,284
Aug	2,081,961	[1] 1,531,835	403,628	872,796	241,742	550,126	84,322	4,470	358,380	102,953
Sept	2,122,684	[1] 1,564,329	410,730	896,884	241,716	558,355	85,551	4,128	365,872	102,804
Oct	2,136,596	[1] 1,567,492	412,166	898,631	241,695	569,103	87,005	4,468	374,109	103,521
Nov	2,167,058	[1] 1,591,874	423,759	903,269	249,845	575,184	89,926	4,282	374,298	106,678
Dec	2,212,034	[1] 1,618,961	426,679	927,459	249,824	593,073	90,594	4,661	386,867	110,951

[1] Beginning October 1985, includes Federal Financing Bank securities, not shown separately: $8,747 million in October 1985, $14,194 million in November 1985 through January 1986, $14,169 million in February through May 1986, $13,670 million in August 1986, and $15,000 in September through December 1986.

[2] Nonmarketable certificates of indebtedness, notes, bonds, and bills in the Treasury foreign series of dollar-denominated and foreign-currency denominated issues.

[3] Includes depository bonds, retirement plan bonds, Rural Electrification Administration bonds, State and local bonds, and special issues held only by U.S. Government agencies and trust funds and the Federal home loan banks.

[4] Includes $5,610 million in certificates not shown separately.

Note.—Through fiscal year 1976, the fiscal year was on a July 1–June 30 basis; beginning October 1976 (fiscal year 1977), the fiscal year is on an October 1–September 30 basis.

Source: Department of the Treasury.

TABLE B–82.—*Maturity distribution and average length of marketable interest-bearing public debt securities held by private investors, 1967–86*

End of year or month	Amount outstanding, privately held	Maturity class					Average length	
		Within 1 year	1 to 5 years	5 to 10 years	10 to 20 years	20 years and over		
	Millions of dollars						Years	Months
Fiscal year:								
1967	150,321	56,561	53,584	21,057	6,153	12,968	5	1
1968	159,671	66,746	52,295	21,850	6,110	12,670	4	5
1969	156,008	69,311	50,182	18,078	6,097	12,337	4	2
1970	157,910	76,443	57,035	8,286	7,876	8,272	3	8
1971	161,863	74,803	58,557	14,503	6,357	7,645	3	6
1972	165,978	79,509	57,157	16,033	6,358	6,922	3	3
1973	167,869	84,041	54,139	16,385	8,741	4,564	3	1
1974	164,862	87,150	50,103	14,197	9,930	3,481	2	11
1975	210,382	115,677	65,852	15,385	8,857	4,611	2	8
1976	279,782	151,723	89,151	24,169	8,087	6,652	2	7
1977	326,674	161,329	113,319	33,067	8,428	10,531	2	11
1978	356,501	163,819	132,993	33,500	11,383	14,805	3	3
1979	380,530	181,883	127,574	32,279	18,489	20,304	3	7
1980	463,717	220,084	156,244	38,809	25,901	22,679	3	9
1981	549,863	256,187	182,237	48,743	32,569	30,127	4	0
1982	682,043	314,436	221,783	75,749	33,017	37,058	3	11
1983	862,631	379,579	294,955	99,174	40,826	48,097	4	1
1984	1,017,488	437,941	332,808	130,417	49,664	66,658	4	6
1985	1,185,675	472,661	402,766	159,383	62,853	88,012	4	11
1986	1,354,275	506,903	467,348	189,995	70,664	119,365	5	3
1985: Jan	1,099,857	461,758	372,608	137,280	56,353	71,858	4	6
Feb	1,110,272	462,955	378,690	136,490	54,699	77,438	4	8
Mar	1,106,798	463,882	366,843	143,745	54,722	77,606	4	8
Apr	1,121,977	457,352	385,122	143,704	54,320	81,478	4	8
May	1,145,271	467,260	392,430	145,696	58,372	81,513	4	10
June	1,138,109	465,310	379,046	153,878	58,362	81,513	4	10
July	1,171,662	470,538	401,502	155,237	62,872	81,513	4	9
Aug	1,173,579	473,060	398,089	151,550	62,867	88,013	5	0
Sept	1,185,675	472,661	402,766	159,383	62,853	88,012	4	11
Oct	1,193,376	480,307	407,877	154,326	62,853	88,013	4	10
Nov	1,224,074	492,916	413,960	156,262	66,154	94,782	5	0
Dec	1,237,340	490,217	423,625	163,049	66,003	94,446	5	0
1986: Jan	1,251,882	492,408	429,808	164,242	66,045	99,379	5	0
Feb	1,268,648	496,927	434,036	165,187	70,810	101,688	5	2
Mar	1,277,307	496,137	435,704	172,974	70,804	101,688	5	1
Apr	1,281,210	498,504	437,756	173,434	70,389	101,127	5	1
May	1,286,970	493,622	438,261	173,587	70,793	110,707	5	4
June	1,309,827	496,114	450,670	181,384	70,952	110,707	5	3
July	1,322,700	501,204	456,984	182,860	70,946	110,706	5	2
Aug	1,328,833	499,103	456,689	182,388	70,941	119,712	5	5
Sept	1,354,275	506,903	467,348	189,995	70,664	119,365	5	3
Oct	1,358,195	504,767	477,871	184,917	70,928	119,712	5	3
Nov	1,377,141	513,311	473,818	190,631	70,847	128,534	5	5
Dec	1,388,733	511,117	481,772	197,594	70,657	127,593	5	4

Note.—All issues classified to final maturity.

Through fiscal year 1976, the fiscal year was on a July 1—June 30 basis; beginning October 1976 (fiscal year 1977), the fiscal year is on an October 1—September 30 basis.

Source: Department of the Treasury.

TABLE B-83.—*Estimated ownership of public debt securities by private investors, 1976–86*

[Par values;[1] billions of dollars]

End of month	Held by private investors											
	Total	Commercial banks[2]	Nonbank investors									
			Total	Individuals[3]			Insurance companies	Money market funds	Corporations[5]	State and local governments[6]	Foreign and international[7]	Other investors[8]
				Total	Savings bonds[4]	Other securities						
1976:												
June	376.4	91.4	285.0	96.1	69.6	26.5	14.4	0.8	23.3	34.2	69.8	46.4
Dec	409.5	103.5	306.0	101.6	72.0	29.6	16.2	1.1	23.5	40.9	78.1	44.6
1977:												
June	421.0	102.7	318.3	104.9	74.4	30.5	18.1	.8	22.1	50.3	87.9	34.2
Dec	461.3	98.9	362.4	107.8	76.7	31.1	19.9	.9	18.2	58.1	109.6	47.9
1978:												
June	477.8	97.8	380.0	109.0	79.1	29.9	19.7	1.3	17.3	70.0	119.5	43.2
Dec	508.6	95.0	413.6	114.0	80.7	33.3	20.0	1.5	17.3	76.1	133.1	51.6
1979:												
June	516.6	86.1	430.5	115.5	80.6	34.9	20.9	3.8	18.6	78.7	114.9	78.1
Dec	540.5	88.1	452.4	118.0	79.9	38.1	21.4	5.6	17.0	81.7	119.0	89.7
1980:												
June	558.2	97.4	460.8	116.5	73.4	43.1	22.3	5.3	14.0	83.3	118.2	101.2
Dec	616.4	112.1	504.3	117.1	72.5	44.6	24.0	3.5	19.3	87.9	129.7	122.8
1981:												
June	651.2	119.7	531.5	107.4	69.2	38.2	26.4	9.0	19.9	94.2	136.6	138.0
Dec	694.5	111.4	583.1	110.8	68.1	42.7	29.0	21.5	17.9	96.8	136.6	170.5
1982:												
Mar	733.3	116.1	617.2	112.5	67.5	45.0	32.1	25.7	16.9	99.0	136.1	194.9
June	740.9	116.1	624.8	114.1	67.4	46.7	32.5	22.4	17.6	103.3	137.2	197.7
Sept	791.2	117.8	673.4	115.6	67.6	48.0	34.8	38.6	21.6	109.0	140.6	213.2
Dec	848.4	131.4	717.0	116.5	68.3	48.2	39.1	42.6	24.5	116.6	149.5	228.2
1983:												
Mar	906.6	153.2	753.4	116.7	68.8	47.9	43.7	44.8	27.2	123.7	156.2	241.1
June	948.6	171.6	777.0	121.3	69.7	51.6	47.4	28.3	32.8	135.2	160.1	251.9
Sept	982.7	176.3	806.4	128.9	70.6	58.4	51.2	22.1	35.9	143.0	160.1	265.0
Dec	1,022.6	188.8	833.8	133.4	71.5	61.9	56.7	22.8	39.7	150.5	166.3	264.4
1984:												
Mar	1,073.0	189.8	883.2	136.2	72.2	64.0	60.7	19.4	42.6	157.7	166.3	300.3
June	1,102.2	182.3	919.9	142.2	72.9	69.3	63.4	14.9	45.3	165.4	171.6	317.1
Sept	1,154.1	183.0	971.1	142.4	73.7	68.7	68.4	13.6	47.7	172.4	175.5	351.1
Dec	1,212.5	183.4	1,029.1	143.8	74.5	69.3	76.4	25.9	50.1	179.4	192.9	360.6
1985:												
Mar	1,254.1	195.0	1,059.1	145.1	75.4	69.7	80.4	26.7	50.8	189.7	186.4	380.0
June	1,292.0	196.3	1,095.7	148.7	76.7	72.0	85.0	24.8	54.9	198.9	200.7	382.7
Sept	1,338.2	196.9	1,141.3	151.4	78.2	73.2	88.6	22.7	59.0	212.8	209.8	397.0
Dec	1,417.2	192.2	1,225.0	154.8	79.8	75.0	93.2	25.1	59.0	....	214.6	....
1986:												
Mar	1,473.1	195.1	1,278.0	157.6	81.4	76.2	95.8	29.9	59.6	....	225.4	....
June	1,502.7	197.2	1,305.5	157.2	83.8	73.9	....	22.8	59.8	....	239.8	....
Sept	1.553.3	212.5	1,340.8	156.1	87.1	69.0	....	24.9	67.0	....	256.3	....

[1] U.S. savings bonds, series A–F and J, are included at current redemption value.

[2] Includes domestically chartered banks, U.S. branches and agencies of foreign banks, New York investment companies majority owned by foreign banks, and Edge Act corporations owned by domestically chartered and foreign banks.

[3] Includes partnerships and personal trust accounts.

[4] Includes U.S. savings notes. Sales began May 1, 1967, and were discontinued June 30, 1970.

[5] Exclusive of banks and insurance companies.

[6] Includes State and local pension funds.

[7] Consists of the investment of foreign balances and international accounts in the United States.

[8] Includes savings and loan associations, credit unions, nonprofit institutions, mutual savings banks, corporate pension trust funds, dealers and brokers, certain Government deposit accounts, and Government-sponsored agencies.

Source: Department of the Treasury.

TABLE B-84.—*Corporate profits with inventory valuation and capital consumption adjustments, 1929–86*

[Billions of dollars; quarterly data at seasonally adjusted annual rates]

Year or quarter	Corporate profits with inventory valuation and capital consumption adjustments	Corporate profits tax liability	Corporate profits after tax with inventory valuation and capital consumption adjustments		
			Total	Dividends	Undistributed profits with inventory valuation and capital consumption adjustments
1929	9.6	1.4	8.2	5.8	2.4
1933	−1.5	.5	−2.1	2.0	−4.1
1939	5.5	1.4	4.0	3.8	.3
1940	8.8	2.8	5.9	4.0	1.9
1941	14.3	7.6	6.7	4.4	2.3
1942	19.7	11.4	8.3	4.3	4.0
1943	24.0	14.1	9.9	4.4	5.5
1944	24.2	12.9	11.2	4.6	6.6
1945	19.7	10.7	9.0	4.6	4.4
1946	17.2	9.1	8.0	5.6	2.5
1947	22.9	11.3	11.7	6.3	5.4
1948	30.3	12.4	17.8	7.0	10.8
1949	28.0	10.2	17.8	7.2	10.6
1950	34.9	17.9	17.0	8.8	8.2
1951	39.9	22.6	17.3	8.5	8.8
1952	37.5	19.4	18.1	8.5	9.6
1953	37.7	20.3	17.4	8.8	8.6
1954	36.6	17.6	19.0	9.1	9.8
1955	47.1	22.0	25.1	10.3	14.8
1956	45.7	22.0	23.8	11.1	12.7
1957	45.3	21.4	23.8	11.5	12.3
1958	40.3	19.0	21.4	11.3	10.1
1959	51.4	23.6	27.8	12.2	15.6
1960	49.5	22.7	26.8	12.9	13.9
1961	50.3	22.8	27.6	13.3	14.2
1962	58.3	24.0	34.3	14.4	19.9
1963	63.6	26.2	37.4	15.5	21.9
1964	70.7	28.0	42.7	17.3	25.3
1965	81.3	30.9	50.4	19.1	31.3
1966	86.6	33.7	52.9	19.4	33.5
1967	84.1	32.7	51.4	20.2	31.2
1968	90.7	39.4	51.4	22.0	29.4
1969	87.4	39.7	47.7	22.5	25.2
1970	74.7	34.4	40.3	22.5	17.9
1971	87.1	37.7	49.3	22.9	26.4
1972	100.7	41.9	58.8	24.4	34.4
1973	113.3	49.3	64.1	27.0	37.0
1974	101.7	51.8	49.9	29.7	20.2
1975	117.6	50.9	66.7	29.6	37.1
1976	145.2	64.2	81.0	34.6	46.4
1977	174.8	73.0	101.8	39.5	62.3
1978	197.2	83.5	113.7	44.7	69.0
1979	200.1	88.0	112.1	50.1	62.0
1980	177.2	84.8	92.4	54.7	37.7
1981	188.0	81.1	105.8	63.6	43.2
1982	150.0	63.1	86.9	66.9	20.0
1983	213.7	77.2	136.5	71.5	65.0
1984	264.7	95.4	169.3	78.3	91.0
1985	280.7	91.8	188.9	81.6	107.3
1986 [p]	299.7	102.8	196.9	87.8	109.1
1982: IV	146.1	59.8	86.3	68.5	17.9
1983: IV	248.5	88.1	160.4	73.9	86.5
1984: I	262.5	102.9	159.6	76.0	83.5
II	271.7	101.6	170.1	78.1	92.0
III	259.8	89.3	170.5	79.0	91.5
IV	265.0	87.8	177.1	80.1	97.0
1985: I	266.4	87.8	178.7	80.9	97.8
II	274.3	87.1	187.2	81.4	105.8
III	296.3	95.8	200.5	81.6	118.8
IV	285.6	96.4	189.2	82.5	106.8
1986: I	296.4	95.7	200.7	85.2	115.5
II	293.1	99.0	194.2	87.5	106.6
III	302.0	104.4	197.6	88.8	108.8

Source: Department of Commerce, Bureau of Economic Analysis.

Table B–85.—*Corporate profits by industry, 1929–86*

[Billions of dollars; quarterly data at seasonally adjusted annual rates]

Year or quarter	Corporate profits with inventory valuation adjustment and without capital consumption adjustment										
	Total	Domestic industries									Rest of the world
		Total	Financial [1]			Nonfinancial					
			Total	Federal Reserve banks	Other	Total	Manufacturing [2]	Transportation and public utilities	Wholesale and retail trade	Other	
1929	10.5	10.2	1.3	0.0	1.3	8.9	5.2	1.8	1.0	0.9	0.2
1933	−1.2	−1.2	.3	.0	.3	−1.5	−.4	.0	−.5	−.7	.0
1939	6.5	6.1	.8	.0	.8	5.3	3.3	1.0	.7	.3	.3
1940	9.8	9.6	1.0	.0	.9	8.6	5.5	1.3	1.2	.6	.3
1941	15.4	15.0	1.1	.0	1.0	14.0	9.5	2.0	1.4	1.1	.4
1942	20.5	20.1	1.2	.0	1.2	18.9	11.8	3.4	2.2	1.5	.4
1943	24.5	24.1	1.3	.0	1.3	22.8	13.8	4.4	3.0	1.6	.4
1944	24.0	23.5	1.6	.1	1.6	21.9	13.2	3.9	3.2	1.6	.4
1945	19.3	18.9	1.7	.1	1.6	17.3	9.7	2.7	3.3	1.5	.3
1946	19.6	18.9	2.1	.1	2.0	16.8	9.0	1.8	3.8	2.1	.7
1947	25.9	24.9	1.7	.1	1.6	23.2	13.6	2.2	4.6	2.9	1.0
1948	33.4	32.2	2.6	.2	2.3	29.6	17.6	3.0	5.5	3.6	1.3
1949	31.1	29.9	3.1	.2	2.9	26.8	16.2	3.0	4.5	3.1	1.1
1950	37.9	36.7	3.1	.2	3.0	33.5	20.9	4.0	5.0	3.6	1.3
1951	43.3	41.5	3.6	.3	3.3	37.9	24.6	4.6	5.0	3.7	1.7
1952	40.6	38.7	4.0	.4	3.7	34.7	21.7	4.9	4.8	3.3	1.9
1953	40.2	38.4	4.5	.4	4.1	33.9	22.0	5.0	3.8	3.1	1.8
1954	38.4	36.4	4.6	.3	4.3	31.8	19.9	4.7	3.8	3.4	2.0
1955	47.5	45.1	4.8	.3	4.5	40.3	26.0	5.6	5.0	3.6	2.4
1956	46.9	44.1	5.0	.5	4.5	39.1	24.7	5.9	4.5	4.1	2.8
1957	46.6	43.5	5.2	.6	4.6	38.3	24.0	5.8	4.4	4.0	3.1
1958	41.6	39.1	5.7	.6	5.1	33.5	19.4	5.9	4.6	3.6	2.5
1959	52.3	49.6	6.8	.7	6.0	42.9	26.4	7.0	5.9	3.6	2.7
1960	49.8	46.7	7.2	1.0	6.2	39.5	23.6	7.4	4.9	3.6	3.1
1961	50.1	46.8	7.0	.8	6.3	39.8	23.3	7.8	5.0	3.7	3.3
1962	55.2	51.5	7.3	.9	6.4	44.2	26.0	8.4	5.8	3.9	3.7
1963	59.8	55.8	6.8	1.0	5.8	49.0	29.3	9.3	5.9	4.4	4.0
1964	66.2	61.8	6.9	1.1	5.8	54.9	32.3	10.0	7.5	5.1	4.4
1965	76.2	71.5	7.5	1.4	6.2	64.0	39.3	11.0	8.1	5.6	4.6
1966	81.2	76.7	8.5	1.7	6.8	68.2	41.9	11.8	8.2	6.3	4.4
1967	78.6	73.9	9.0	2.0	7.0	64.9	38.6	10.7	9.1	6.5	4.7
1968	85.4	79.9	10.4	2.5	7.9	69.5	41.4	10.8	10.4	6.9	5.5
1969	81.4	74.8	11.2	3.1	8.1	63.7	36.7	10.3	10.5	6.1	6.5
1970	69.5	62.6	12.2	3.6	8.6	50.4	26.7	8.2	9.6	5.9	6.9
1971	82.7	75.1	14.1	3.3	10.7	61.0	34.3	8.5	11.7	6.5	7.6
1972	94.9	85.5	15.4	3.4	12.0	70.2	40.8	9.0	13.4	6.9	9.3
1973	107.1	92.6	15.8	4.5	11.2	76.8	46.2	8.5	13.9	8.2	14.5
1974	99.4	82.4	14.7	5.7	8.9	67.8	39.8	6.7	12.9	8.3	17.0
1975	123.9	109.5	11.2	5.7	5.5	98.3	53.6	10.3	22.2	12.2	14.4
1976	155.3	139.3	15.9	6.0	9.9	123.4	70.9	14.8	23.0	14.7	16.0
1977	183.8	165.5	21.6	6.2	15.4	143.9	80.6	17.9	27.5	17.8	18.3
1978	208.2	186.0	29.1	7.7	21.4	156.8	88.7	20.9	27.3	20.0	22.2
1979	214.1	180.4	27.8	9.6	18.2	152.6	87.5	15.2	28.7	21.1	33.7
1980	194.0	159.6	21.0	11.9	9.0	138.6	77.1	17.6	21.6	22.4	34.4
1981	202.3	173.8	16.5	14.5	1.9	157.3	88.5	19.5	32.5	16.8	28.5
1982	159.2	131.2	11.8	15.4	−3.6	119.4	58.0	19.3	34.6	7.5	28.0
1983	196.7	166.6	18.1	14.8	3.3	148.5	70.1	28.5	38.9	10.9	30.2
1984	230.2	199.2	15.4	16.7	−1.3	183.8	87.4	32.6	49.7	14.1	31.0
1985	222.6	190.8	21.0	16.8	4.3	169.7	73.0	33.0	49.7	14.0	31.8
1985 ^{p}	242.9	207.4	29.3	15.9	13.4	178.1	73.4	38.8	50.7	15.1	35.5
1982: IV	150.7	121.6	18.7	14.8	3.9	102.9	46.8	16.3	33.6	6.2	29.1
1983: IV	223.4	190.7	15.5	15.4	.1	175.2	88.6	31.3	43.1	12.2	32.7
1984: I	235.7	205.2	16.6	16.1	.5	188.6	95.0	34.6	46.2	12.8	30.6
II	241.5	211.5	15.4	16.4	−1.0	196.1	94.6	34.7	51.1	15.8	30.0
III	223.3	191.3	13.4	17.0	−3.6	177.8	81.3	31.1	51.0	14.5	32.0
IV	220.3	188.8	16.1	17.4	−1.2	172.6	78.9	29.9	50.7	13.1	31.5
1985: I	213.3	182.6	18.2	17.1	1.1	164.4	70.4	31.7	48.8	13.6	30.6
II	215.4	183.8	21.1	17.1	4.0	162.7	68.2	30.9	51.1	12.6	31.6
III	235.3	205.3	21.7	16.5	5.2	183.6	79.0	36.6	54.2	13.9	30.0
IV	226.4	191.3	23.2	16.3	6.9	168.1	74.5	32.7	45.0	15.9	35.1
1986: I	239.0	200.6	27.8	17.0	10.8	172.8	66.7	36.8	52.1	17.1	38.4
II	238.3	205.4	29.1	16.2	13.0	176.3	76.8	38.6	46.3	14.6	32.9
III	246.5	211.8	28.9	15.5	13.4	182.9	75.6	40.3	53.3	13.7	34.7

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[1] Consists of the following industries: Banking; credit agencies other than banks; security and commodity brokers, dealers, and services; insurance carriers; regulated investment companies; small business investment companies; and real estate investment trusts.

[2] See Table B–86 for industry detail.

Note.—The industry classification is on a company basis and is based on the 1972 Standard Industrial Classification (SIC) beginning 1948, and on the 1942 SIC prior to 1948.

Source: Department of Commerce, Bureau of Economic Analysis.

Table B–86.—*Corporate profits of manufacturing industries, 1929–86*

[Billions of dollars; quarterly data at seasonally adjusted annual rates]

Year or quarter	Corporate profits with inventory valuation adjustment and without capital consumption adjustment												
	Total manufacturing	Durable goods							Nondurable goods				
		Total	Primary metal industries	Fabricated metal products	Machinery, except electrical	Electric and electronic equipment	Motor vehicles and equipment	Other	Total	Food and kindred products	Chemicals and allied products	Petroleum and coal products	Other
1929	5.2	2.6	......	......	......	......	......	......	2.6	......	......	......	......
1933	−.4	−.4	......	......	......	......	......	......	.0	......	......	......	......
1939	3.3	1.7	......	......	......	......	......	......	1.7	......	......	......	......
1940	5.5	3.1	......	......	......	......	......	......	2.4	......	......	......	......
1941	9.5	6.4	......	......	......	......	......	......	3.1	......	......	......	......
1942	11.8	7.2	......	......	......	......	......	......	4.6	......	......	......	......
1943	13.8	8.1	......	......	......	......	......	......	5.7	......	......	......	......
1944	13.2	7.4	......	......	......	......	......	......	5.9	......	......	......	......
1945	9.7	4.5	......	......	......	......	......	......	5.2	......	......	......	......
1946	9.0	2.4	......	......	......	......	......	......	6.6	......	......	......	......
1947	13.6	5.8	......	......	......	......	......	......	7.8	......	......	......	......
1948	17.6	7.5	1.6	0.8	1.2	0.7	1.4	1.8	10.0	1.9	1.7	2.8	3.7
1949	16.2	8.1	1.5	.7	1.3	.8	2.1	1.7	8.1	1.6	1.8	1.9	2.8
1950	20.9	12.0	2.3	1.1	1.6	1.2	3.1	2.6	8.9	1.6	2.3	2.3	2.7
1951	24.6	13.2	3.1	1.3	2.3	1.3	2.4	2.8	11.4	1.4	2.8	2.7	4.4
1952	21.7	11.7	1.9	1.0	2.3	1.5	2.4	2.6	9.9	1.7	2.3	2.3	3.6
1953	22.0	11.9	2.5	1.0	1.9	1.4	2.6	2.6	10.1	1.8	2.2	2.8	3.3
1954	19.9	10.5	1.7	.9	1.7	1.2	2.1	2.9	9.4	1.6	2.2	2.7	2.9
1955	26.0	14.3	2.9	1.1	1.7	1.1	4.1	3.5	11.8	2.2	3.0	3.0	3.6
1956	24.7	12.8	3.0	1.1	2.1	1.2	2.2	3.2	11.9	1.8	2.8	3.3	4.1
1957	24.0	13.3	3.0	1.1	2.0	1.5	2.6	3.1	10.7	1.8	2.8	2.6	3.6
1958	19.4	9.3	1.9	.9	1.4	1.3	0.9	2.9	10.0	2.1	2.5	2.1	3.3
1959	26.4	13.7	2.3	1.1	2.1	1.7	3.0	3.5	12.7	2.4	3.5	2.5	4.3
1960	23.6	11.6	2.0	.8	1.8	1.3	3.0	2.7	12.0	2.2	3.1	2.5	4.2
1961	23.3	11.4	1.6	1.0	1.9	1.3	2.5	3.1	11.9	2.3	3.2	2.2	4.1
1962	26.0	14.0	1.6	1.1	2.3	1.5	4.0	3.5	12.0	2.3	3.2	2.2	4.3
1963	29.3	16.3	2.0	1.3	2.5	1.6	4.9	4.0	13.1	2.7	3.6	2.1	4.6
1964	32.3	17.9	2.5	1.4	3.3	1.7	4.7	4.4	14.4	2.7	4.0	2.4	5.3
1965	39.3	23.0	3.1	2.0	3.9	2.7	6.2	5.1	16.3	2.8	4.6	2.9	6.0
1966	41.9	23.8	3.6	2.4	4.5	3.0	5.1	5.2	18.1	3.2	4.9	3.2	6.8
1967	38.6	21.0	2.7	2.4	4.1	2.9	3.9	4.9	17.6	3.2	4.3	3.9	6.3
1968	41.4	22.2	1.9	2.3	4.1	2.8	5.5	5.7	19.1	3.2	5.2	3.7	7.0
1969	36.7	19.0	1.4	2.0	3.7	2.3	4.8	4.9	17.7	3.0	4.6	3.3	6.9
1970	26.7	10.2	0.8	1.1	3.0	1.2	1.2	2.9	16.5	3.2	3.9	3.5	5.9
1971	34.3	16.4	.7	1.5	2.9	1.9	5.1	4.3	17.9	3.5	4.5	3.6	6.4
1972	40.8	22.5	1.6	2.1	4.3	2.8	5.9	5.8	18.3	2.9	5.2	3.0	7.2
1973	46.2	24.7	2.3	2.6	4.7	3.0	5.8	6.2	21.6	2.5	6.0	5.2	7.9
1974	39.8	14.6	4.9	1.6	3.1	.3	0.7	4.0	25.2	2.5	5.1	10.7	7.0
1975	53.6	19.8	2.7	3.1	4.8	2.4	2.0	4.8	33.8	8.8	6.4	9.5	9.1
1976	70.9	31.3	2.0	3.9	6.7	3.7	7.2	7.9	39.6	7.1	8.2	13.1	11.2
1977	80.6	38.6	1.3	4.4	8.9	5.8	9.4	8.8	42.0	6.9	7.8	12.9	14.4
1978	88.7	44.6	3.5	4.9	9.6	6.7	8.9	10.9	44.0	6.2	8.2	14.7	14.9
1979	87.5	37.3	3.6	5.2	9.1	5.2	4.7	9.5	50.2	5.8	7.2	22.5	14.7
1980	77.1	21.3	2.5	4.3	7.7	4.7	−2.5	4.5	55.8	6.1	5.4	31.4	12.9
1981	88.5	21.0	3.1	4.4	8.6	4.1	.1	0.7	67.5	8.7	8.2	36.5	14.1
1982	58.0	2.1	−4.9	2.4	4.1	1.7	−.8	−.4	55.9	7.0	5.2	29.1	14.5
1983	70.1	17.2	−4.9	3.0	3.1	3.7	5.1	7.2	53.0	7.2	6.7	21.4	17.7
1984	87.4	34.8	−2.6	4.6	4.7	5.2	9.9	13.1	52.6	8.0	7.5	17.3	19.7
1985	73.0	28.0	−3.6	4.1	3.6	4.9	6.8	12.1	45.0	7.8	4.7	13.4	19.1
1986 ᵖ	73.4	31.6	−2.0	5.0	3.4	5.4	4.9	14.9	41.9	10.3	7.3	7.6	16.7
1982: IV	46.8	−6.6	−5.1	.9	1.3	.1	−2.7	−1.2	53.5	7.1	3.2	25.9	17.3
1983: IV	88.6	29.4	−4.4	4.4	4.7	6.2	8.7	9.9	59.2	8.0	7.8	25.3	18.1
1984: I	95.0	36.8	−2.6	4.2	5.3	5.7	11.5	12.8	58.2	8.8	8.8	20.0	20.6
II	94.6	34.9	−1.8	4.5	5.6	5.1	7.9	13.6	59.7	8.6	8.3	22.5	20.3
III	81.3	33.2	−3.3	4.3	4.0	5.2	10.2	12.8	48.1	7.4	7.0	14.0	19.7
IV	78.9	34.5	−2.7	5.2	4.1	4.8	10.1	13.1	44.4	7.3	6.0	12.8	18.3
1985: I	70.4	27.8	−4.1	4.4	1.5	4.3	9.0	12.8	42.6	7.2	5.4	10.5	19.6
II	68.2	28.8	−3.9	4.6	3.5	5.2	7.6	11.9	39.4	7.6	5.3	7.4	19.1
III	79.0	28.9	−2.6	4.5	4.6	6.0	4.2	12.3	50.1	9.1	5.3	17.0	18.7
IV	74.5	26.6	−3.6	3.0	4.7	4.3	6.6	11.6	47.9	7.6	2.8	18.7	18.9
1986: I	66.7	28.1	−2.6	4.7	2.2	4.7	6.4	12.7	38.6	9.3	6.3	7.3	15.7
II	76.8	34.6	−1.1	5.0	4.9	7.2	4.9	13.7	42.2	10.0	6.4	9.7	16.1
III	75.6	31.8	−2.3	5.1	2.8	4.9	4.1	17.1	43.9	11.2	8.3	7.0	17.4

Note.—The industry classification is on a company basis and is based on the 1972 Standard Industrial Classification (SIC) beginning 1948, and on the 1942 SIC prior to 1948.

Source: Department of Commerce, Bureau of Economic Analysis.

TABLE B–87.—*Sales, profits, and stockholders' equity, all manufacturing corporations, 1950–86*

[Billions of dollars]

Year or quarter	All manufacturing corporations				Durable goods industries				Nondurable goods industries			
	Sales (net)	Profits		Stock-holders' equity[2]	Sales (net)	Profits		Stock-holders' equity[2]	Sales (net)	Profits		Stock-holders' equity[2]
		Before income taxes[1]	After income taxes			Before income taxes[1]	After income taxes			Before income taxes[1]	After income taxes	
1950	181.9	23.2	12.9	83.3	86.8	12.9	6.7	39.9	95.1	10.3	6.1	43.5
1951	245.0	27.4	11.9	98.3	116.8	15.4	6.1	47.2	128.1	12.1	5.7	51.1
1952	250.2	22.9	10.7	103.7	122.0	12.9	5.5	49.8	128.0	10.0	5.2	53.9
1953	265.9	24.4	11.3	108.2	137.9	14.0	5.8	52.4	128.0	10.4	5.5	55.7
1954	248.5	20.9	11.2	113.1	122.8	11.4	5.6	54.9	125.7	9.6	5.6	58.2
1955	278.4	28.6	15.1	120.1	142.1	16.5	8.1	58.8	136.3	12.1	7.0	61.3
1956	307.3	29.8	16.2	131.6	159.5	16.5	8.3	65.2	147.8	13.2	7.8	66.4
1957	320.0	28.2	15.4	141.1	166.0	15.8	7.9	70.5	154.1	12.4	7.5	70.6
1958	305.3	22.7	12.7	147.4	148.6	11.4	5.8	72.8	156.7	11.3	6.9	74.6
1959	338.0	29.7	16.3	157.1	169.4	15.8	8.1	77.9	168.5	13.9	8.3	79.2
1960	345.7	27.5	15.2	165.4	173.9	14.0	7.0	82.3	171.8	13.5	8.2	83.1
1961	356.4	27.5	15.3	172.6	175.2	13.6	6.9	84.9	181.2	13.9	8.5	87.7
1962	389.4	31.9	17.7	181.4	195.3	16.8	8.6	89.1	194.1	15.1	9.2	92.3
1963	412.7	34.9	19.5	189.7	209.0	18.5	9.5	93.3	203.6	16.4	10.0	96.3
1964	443.1	39.6	23.2	199.8	226.3	21.2	11.6	98.5	216.8	18.3	11.6	101.3
1965	492.2	46.5	27.5	211.7	257.0	26.2	14.5	105.4	235.2	20.3	13.0	106.3
1966	554.2	51.8	30.9	230.3	291.7	29.2	16.4	115.2	262.4	22.6	14.6	115.1
1967	575.4	47.8	29.0	247.6	300.6	25.7	14.6	125.0	274.8	22.0	14.4	122.6
1968	631.9	55.4	32.1	265.9	335.5	30.6	16.5	135.6	296.4	24.8	15.5	130.3
1969	694.6	58.1	33.2	289.9	366.5	31.5	16.9	147.6	328.1	26.6	16.4	142.3
1970	708.8	48.1	28.6	306.8	363.1	23.0	12.9	155.1	345.7	25.2	15.7	151.7
1971	751.1	52.9	31.0	320.8	381.8	26.5	14.5	160.4	369.3	26.5	16.5	160.5
1972	849.5	63.2	36.5	343.4	435.8	33.6	18.4	171.4	413.7	29.6	18.0	172.0
1973	1,017.2	81.4	48.1	374.1	527.3	43.6	24.8	188.7	489.9	37.8	23.3	185.4
1973: IV	275.1	21.4	13.0	386.4	140.1	10.8	6.3	194.7	135.0	10.6	6.7	191.7
New series:												
1973: IV	236.6	20.6	13.2	368.0	122.7	10.1	6.2	185.8	113.9	10.5	7.0	182.1
1974	1,060.6	92.1	58.7	395.0	529.0	41.1	24.7	196.0	531.6	51.0	34.1	199.0
1975	1,065.2	79.9	49.1	423.4	521.1	35.3	21.4	208.1	544.1	44.6	27.7	215.3
1976	1,203.2	104.9	64.5	462.7	589.6	50.7	30.8	224.3	613.7	54.3	33.7	238.4
1977	1,328.1	115.1	70.4	496.7	657.3	57.9	34.8	239.9	670.8	57.2	35.5	256.8
1978	1,496.4	132.5	81.1	540.5	760.7	69.6	41.8	262.6	735.7	62.9	39.3	277.9
1979	1,741.8	154.2	98.7	600.5	865.7	72.4	45.2	292.5	876.1	81.8	53.5	308.0
1980	1,912.8	145.8	92.6	668.1	889.1	57.4	35.6	317.7	1,023.7	88.4	56.9	350.4
1981	2,144.7	158.6	101.3	743.4	979.5	67.2	41.6	350.4	1,165.2	91.3	59.6	393.0
1982	2,039.4	108.2	70.9	770.2	913.1	34.7	21.7	355.5	1,126.4	73.6	49.3	414.7
1983	2,114.3	133.1	85.8	812.8	973.5	48.7	30.0	372.4	1,140.8	84.4	55.8	440.4
1984	2,335.0	165.6	107.6	864.2	1,107.6	75.5	48.9	395.6	1,227.5	90.0	58.8	468.5
1985	2,331.4	137.0	87.6	866.2	1,142.6	61.5	38.6	420.9	1,188.8	75.6	49.1	445.3
1984: I	566.1	42.5	26.7	850.9	264.6	18.9	11.7	386.5	301.5	23.6	15.0	464.5
II	597.9	48.5	31.0	857.0	284.8	22.9	14.6	392.1	313.1	25.6	16.4	464.5
III	577.1	38.5	25.7	865.1	270.7	16.6	11.2	297.2	306.4	21.9	14.5	467.9
IV	594.0	36.1	24.3	883.6	287.5	17.2	11.4	406.7	306.5	19.0	13.0	476.9
1985: I	565.3	35.5	22.5	861.4	276.3	15.5	9.5	414.1	289.1	20.0	13.0	447.3
II	594.1	37.3	23.6	864.0	293.6	18.6	11.4	420.4	300.5	18.7	12.2	443.6
III	578.0	33.5	21.4	868.8	281.1	13.3	8.5	423.7	296.9	20.2	12.9	445.1
IV	593.9	30.7	20.1	870.7	291.6	14.0	9.1	425.6	302.3	16.7	11.0	445.1
1986: I	558.4	31.4	19.7	874.3	278.7	13.2	8.0	436.3	279.7	18.2	11.7	438.0
II	581.1	39.4	27.1	888.4	297.7	17.9	12.0	441.2	283.4	21.5	15.1	447.2
III	561.2	31.3	18.9	891.0	283.9	12.0	6.9	445.6	277.3	19.3	11.9	445.4

[1] In the old series, "income taxes" refers to Federal income taxes only, as State and local income taxes had already been deducted. In the new series, no income taxes have been deducted.

[2] Annual data are average equity for the year (using four end-of-quarter figures).

Note.—Data are not necessarily comparable from one period to another due to changes in accounting procedures, industry classifications, sampling procedures, etc. For explanatory notes concerning compilation of the series, see "Quarterly Financial Report for Manufacturing, Mining, and Trade Corporations," Department of Commerce, Bureau of the Census.

Source: Department of Commerce, Bureau of the Census.

TABLE B–88.—*Relation of profits after taxes to stockholders' equity and to sales, all manufacturing corporations, 1947–86*

Year or quarter	Ratio of profits after income taxes (annual rate) to stockholders' equity—percent[1]			Profits after income taxes per dollar of sales—cents		
	All manufacturing corporations	Durable goods industries	Nondurable goods industries	All manufacturing corporations	Durable goods industries	Nondurable goods industries
1947	15.6	14.4	16.6	6.7	6.7	6.7
1948	16.0	15.7	16.2	7.0	7.1	6.8
1949	11.6	12.1	11.2	5.8	6.4	5.4
1950	15.4	16.9	14.1	7.1	7.7	6.5
1951	12.1	13.0	11.2	4.9	5.3	4.5
1952	10.3	11.1	9.7	4.3	4.5	4.1
1953	10.5	11.1	9.9	4.3	4.2	4.3
1954	9.9	10.3	9.6	4.5	4.6	4.4
1955	12.6	13.8	11.4	5.4	5.7	5.1
1956	12.3	12.8	11.8	5.3	5.2	5.3
1957	10.9	11.3	10.6	4.8	4.8	4.9
1958	8.6	8.0	9.2	4.2	3.9	4.4
1959	10.4	10.4	10.4	4.8	4.8	4.9
1960	9.2	8.5	9.8	4.4	4.0	4.8
1961	8.9	8.1	9.6	4.3	3.9	4.7
1962	9.8	9.6	9.9	4.5	4.4	4.7
1963	10.3	10.1	10.4	4.7	4.5	4.9
1964	11.6	11.7	11.5	5.2	5.1	5.4
1965	13.0	13.8	12.2	5.6	5.7	5.5
1966	13.4	14.2	12.7	5.6	5.6	5.6
1967	11.7	11.7	11.8	5.0	4.8	5.3
1968	12.1	12.2	11.9	5.1	4.9	5.2
1969	11.5	11.4	11.5	4.8	4.6	5.0
1970	9.3	8.3	10.3	4.0	3.5	4.5
1971	9.7	9.0	10.3	4.1	3.8	4.5
1972	10.6	10.8	10.5	4.3	4.2	4.4
1973	12.8	13.1	12.6	4.7	4.7	4.8
1973: IV	13.4	12.9	14.0	4.7	4.5	5.0
New series:						
1973: IV	14.3	13.3	15.3	5.6	5.0	6.1
1974	14.9	12.6	17.1	5.5	4.7	6.4
1975	11.6	10.3	12.9	4.6	4.1	5.1
1976	13.9	13.7	14.2	5.4	5.2	5.5
1977	14.2	14.5	13.8	5.3	5.3	5.3
1978	15.0	16.0	14.2	5.4	5.5	5.3
1979	16.4	15.4	17.4	5.7	5.2	6.1
1980	13.9	11.2	16.3	4.8	4.0	5.6
1981	13.6	11.9	15.2	4.7	4.2	5.1
1982	9.2	6.1	11.9	3.5	2.4	4.4
1983	10.6	8.1	12.7	4.1	3.1	4.9
1984	12.5	12.4	12.5	4.6	4.4	4.8
1985	10.1	9.2	11.0	3.8	3.4	4.1
1984: I	12.5	12.1	12.9	4.7	4.4	5.0
II	14.5	14.9	14.1	5.2	5.1	5.2
III	11.9	11.3	12.4	4.4	4.1	4.7
IV	11.0	11.2	10.9	4.1	4.0	4.2
1985: I	10.5	9.2	11.7	4.0	3.4	4.5
II	10.9	10.9	11.0	4.0	3.9	4.0
III	9.9	8.0	11.6	3.7	3.0	4.3
IV	9.3	8.6	9.9	3.4	3.1	3.6
1986: I	9.0	7.3	10.7	3.5	2.9	4.2
II	12.2	10.9	13.5	4.7	4.0	5.3
III	8.5	6.2	10.7	3.4	2.4	4.3

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[1] Annual ratios based on average equity for the year (using four end-of-quarter figures). Quarterly ratios based on equity at end of quarter only.

Note.—Based on data in millions of dollars.
See Note, Table B–87.

Source: Department of Commerce, Bureau of the Census.

TABLE B–89.—*Sources and uses of funds, nonfarm nonfinancial corporate business, 1946–86*

[Billions of dollars; quarterly data at seasonally adjusted annual rates]

Year or quarter	Sources											Uses			Discrepancy (sources less uses)
	Total	Internal					External					Total	Capital expenditures[3]	Increase in financial assets	
		Total	Domestic undistributed profits	Inventory valuation and capital consumption adjustments	Capital consumption allowances	Foreign earnings[1]	Total	Credit market funds			Other[2]				
								Total	Securities and mortgages	Loans and short-term paper					
1946	19.1	8.5	8.1	−7.6	7.4	0.7	10.6	6.9	3.6	3.3	3.7	17.5	18.8	−1.4	1.6
1947	27.4	13.3	12.1	−8.7	9.0	1.0	14.1	8.4	5.4	3.0	5.8	26.5	18.1	8.4	1.0
1948	29.4	19.7	13.2	−5.2	10.4	1.3	9.8	6.5	6.7	−.2	3.3	25.6	20.7	5.0	3.8
1949	20.5	20.0	8.7	−1.0	11.2	1.1	.4	3.1	4.9	−1.8	−2.7	18.4	14.9	3.5	2.1
1950	42.5	18.5	13.1	−7.9	12.0	1.3	24.0	8.1	4.2	3.9	15.9	40.4	24.0	16.4	2.2
1951	37.0	20.8	9.6	−4.4	13.8	1.7	16.2	10.5	6.4	4.1	5.7	37.9	30.6	7.4	−1.0
1952	30.5	22.5	7.8	−2.0	14.8	1.9	8.0	9.5	8.1	1.5	−1.5	30.0	25.4	4.6	.5
1953	28.6	22.3	8.0	−3.3	15.9	1.8	6.3	5.8	6.2	−.4	.5	28.5	26.2	2.3	.1
1954	30.1	24.4	7.6	−1.9	16.8	2.0	5.7	6.5	6.8	−.3	−.8	28.1	23.3	4.9	1.9
1955	53.4	29.9	11.8	−2.0	17.8	2.4	23.4	10.4	6.6	3.8	13.1	49.1	32.5	16.5	4.3
1956	45.2	30.1	10.9	−3.7	20.0	2.8	15.2	12.7	7.4	5.3	2.5	41.1	37.2	4.0	4.1
1957	43.5	32.0	9.6	−2.7	22.0	3.1	11.5	11.9	10.1	1.8	−.4	40.0	35.7	4.2	3.6
1958	42.3	30.7	6.5	−1.5	23.1	2.5	11.6	10.4	10.5	.0	1.2	38.6	27.8	10.8	3.7
1959	56.8	36.4	10.6	−1.0	24.1	2.7	20.3	12.4	8.3	4.2	7.9	52.1	38.0	14.2	4.6
1960	48.8	35.9	8.0	−.4	25.1	3.1	13.0	11.8	7.4	4.4	1.2	41.8	37.8	3.9	7.0
1961	56.0	36.9	7.2	.6	25.9	3.3	19.1	12.2	10.5	1.7	6.9	50.7	36.5	14.2	5.3
1962	60.3	43.2	9.6	3.1	26.8	3.7	17.1	12.5	9.0	3.5	4.6	56.1	43.8	12.3	4.2
1963	68.5	47.0	11.0	3.9	28.0	4.1	21.5	12.0	8.1	3.9	9.5	60.3	44.6	15.7	8.2
1964	74.1	52.3	14.6	3.9	29.4	4.4	21.8	13.7	7.8	5.9	8.0	64.9	50.1	14.8	9.1
1965	92.9	59.1	19.1	3.9	31.5	4.7	33.8	19.0	7.6	11.4	14.8	83.4	61.7	21.8	9.4
1966	98.4	63.3	21.2	3.3	34.3	4.5	35.1	23.9	14.3	9.5	11.2	91.9	75.3	16.6	6.4
1967	94.8	64.2	18.1	3.9	37.6	4.6	30.6	27.3	19.2	8.1	3.3	87.5	71.2	16.3	7.3
1968	114.7	65.8	17.1	1.7	41.4	5.5	48.9	28.0	15.0	13.0	20.9	106.0	75.4	30.6	8.6
1969	117.9	65.2	13.4	.0	45.4	6.5	52.6	33.8	14.6	19.2	18.8	115.0	83.3	31.6	2.9
1970	102.2	62.8	7.6	−1.6	49.9	6.9	39.5	34.2	26.3	7.9	5.3	98.0	79.3	18.7	4.2
1971	126.4	74.7	12.7	−.5	54.8	7.6	51.7	37.1	32.8	4.3	14.6	121.9	85.2	36.7	4.5
1972	153.4	86.4	18.1	−1.2	60.1	9.3	67.0	43.8	26.4	17.4	23.2	145.1	95.0	50.1	8.3
1973	195.5	93.9	28.8	−14.7	65.2	14.5	101.6	57.6	20.7	36.9	44.0	189.5	119.0	70.5	6.0
1974	194.1	89.3	34.1	−38.1	76.3	17.0	104.8	70.3	26.4	43.9	34.5	190.8	138.6	52.2	3.3
1975	158.4	124.8	36.4	−17.9	91.9	14.4	33.6	27.1	38.5	−11.5	6.5	153.4	112.2	41.2	5.0
1976	219.1	142.0	49.1	−25.4	102.3	16.0	77.1	55.0	38.4	16.7	22.1	210.4	156.9	53.5	8.7
1977	261.4	165.1	58.4	−26.0	114.3	18.3	96.3	72.0	36.0	36.1	24.3	242.2	179.7	62.5	19.3
1978	328.5	182.3	66.9	−36.6	129.8	22.2	146.3	85.0	33.3	51.8	61.2	309.4	216.9	92.4	19.2
1979	352.6	197.6	71.5	−57.2	149.6	33.7	155.1	87.8	21.0	66.9	67.3	362.8	238.3	124.5	−10.1
1980	347.6	200.1	53.7	−59.2	171.3	34.4	147.5	94.3	53.1	41.2	53.2	343.2	244.1	99.1	4.4
1981	382.5	239.5	50.2	−38.0	198.8	28.5	143.0	93.7	22.8	70.9	49.3	349.2	286.3	62.8	33.3
1982	327.6	242.3	11.6	−18.7	221.4	28.1	85.3	80.6	44.0	36.6	4.7	292.0	256.3	35.7	35.6
1983	431.3	285.7	22.2	5.1	228.2	30.2	145.6	87.6	57.3	30.3	58.0	399.1	274.8	124.3	32.2
1984	503.4	326.3	31.5	25.9	237.9	31.0	177.1	116.4	−10.0	126.5	60.7	469.1	371.2	97.9	34.3
1985	483.1	352.5	17.9	52.1	250.6	31.9	130.6	82.1	15.3	66.8	48.5	438.5	353.1	85.4	44.6
1984:															
I	527.3	314.1	39.5	10.8	233.3	30.5	213.2	116.2	−26.9	143.1	97.1	497.6	360.3	137.3	29.7
II	485.1	326.2	37.3	22.5	236.5	29.9	158.9	89.6	−59.7	149.3	69.3	478.4	372.4	106.0	6.7
III	443.7	329.0	26.2	31.3	239.4	32.1	114.8	77.7	−1.0	78.7	37.0	410.8	377.4	33.4	32.9
IV	557.5	335.8	22.9	39.0	242.5	31.5	221.6	182.3	47.6	134.7	39.3	489.6	374.9	114.6	67.9
1985:															
I	432.2	339.4	15.2	47.9	245.7	30.6	92.8	71.7	−10.1	81.8	21.1	407.8	340.1	67.8	24.3
II	421.9	350.3	14.5	55.2	249.1	31.5	71.6	58.2	29.4	28.8	13.4	406.6	349.8	56.8	15.3
III	505.0	365.2	21.4	61.4	252.3	30.0	139.8	53.0	17.0	36.0	86.8	417.3	349.0	68.3	87.7
IV	573.2	355.1	20.6	44.0	255.2	35.3	218.1	145.6	24.8	120.8	72.5	522.3	373.5	148.8	50.9
1986:															
I	413.5	361.7	−1.4	67.5	257.1	38.5	51.8	87.5	51.8	35.7	−35.7	393.0	380.2	12.8	20.6
II	456.0	355.6	3.7	58.7	260.3	32.9	100.3	67.1	50.0	17.0	33.3	430.9	354.4	76.4	25.1
III	389.6	359.6	8.0	54.2	262.6	34.8	30.0	15.4	17.4	−2.0	14.6	344.7	336.3	8.4	45.0

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[1] Foreign branch profits, dividends, and subsidiaries' earnings retained abroad.
[2] Consists of tax liabilities, trade debt, and direct foreign investment in the United States.
[3] Plant and equipment, residential structures, inventory investment, and mineral rights from U.S. Government.

Source: Board of Governors of the Federal Reserve System.

Table B–90.—*State and municipal and business securities offered, 1940–86*

[Millions of dollars]

Year or quarter	State and municipal securities offered for cash (principal amounts)	Business securities offered for cash [1]								
		Total offerings	Type of security			Industry of issuer				
			Common stock [2]	Preferred stock	Bonds and notes	Manufacturing [3]	Electric, gas, and water [4]	Transportation [5]	Communication	Other
1940	1,238	2,677	108	183	2,386	992	1,203	324	...	159
1941	956	2,667	110	167	2,389	848	1,357	366	...	96
1942	524	1,062	34	112	917	539	472	48	...	4
1943	435	1,170	56	124	990	510	477	161	...	21
1944	661	3,202	163	369	2,670	1,061	1,422	609	...	109
1945	795	6,011	397	758	4,855	2,026	2,319	1,454	...	211
1946	1,157	6,900	891	1,127	4,882	3,701	2,158	711	...	329
1947	2,324	6,577	779	762	5,036	2,742	3,257	286	...	293
1948	2,690	7,078	614	492	5,973	2,226	2,187	755	902	1,008
1949	2,907	6,052	736	425	4,890	1,414	2,320	800	571	946
1950	3,532	6,362	811	631	4,920	1,200	2,649	813	399	1,300
1951	3,189	7,741	1,212	838	5,691	3,122	2,455	494	612	1,058
1952	4,401	9,534	1,369	564	7,601	4,039	2,675	992	760	1,068
1953	5,558	8,898	1,326	489	7,083	2,254	3,029	595	882	2,138
1954	6,969	9,516	1,213	816	7,488	2,268	3,713	778	720	2,037
1955	5,977	10,240	2,185	635	7,420	2,994	2,464	893	1,132	2,757
1956	5,446	10,939	2,301	636	8,002	3,647	2,529	724	1,419	2,619
1957	6,958	12,884	2,516	411	9,957	4,234	3,938	824	1,462	2,426
1958	7,449	11,558	1,334	571	9,653	3,515	3,804	824	1,424	1,991
1959	7,681	9,748	2,027	531	7,190	2,073	3,258	967	717	2,733
1960	7,230	10,154	1,664	409	8,081	2,152	2,851	718	1,050	3,383
1961	8,360	13,165	3,294	450	9,420	4,077	3,032	694	1,834	3,527
1962	8,558	10,705	1,314	422	8,969	3,249	2,825	567	1,303	2,761
1963	10,107	12,211	1,011	343	10,856	3,514	2,677	957	1,105	3,957
1964	10,544	13,957	2,679	412	10,865	3,046	2,760	982	2,189	4,980
1965	11,148	14,782	1,473	724	12,585	5,414	2,934	702	945	4,787
1966	11,089	17,385	1,901	580	14,904	7,056	3,666	1,494	2,003	3,167
1967	14,288	24,014	1,927	881	21,206	11,069	4,935	1,639	1,975	4,396
1968	16,374	21,261	3,885	636	16,740	6,958	5,293	1,564	1,775	5,671
1969	11,460	25,997	7,640	691	17,666	6,346	6,715	1,779	2,172	8,985
1970	17,762	37,451	7,037	1,390	29,023	10,647	11,009	1,253	5,291	9,252
1971	24,370	43,229	9,485	3,683	30,061	11,651	11,721	1,148	5,840	12,867
1972	22,941	39,705	10,707	3,371	25,628	6,398	11,314	860	4,836	16,298
1973	22,953	31,680	7,642	3,341	20,700	4,832	10,269	811	4,872	10,897
1974	22,824	37,820	4,050	2,273	31,497	10,511	12,836	1,005	3,932	9,632
1975	29,326	53,632	7,414	3,459	42,759	18,652	15,893	3,637	4,466	10,983
1976	33,845	53,314	8,305	2,803	42,206	15,496	14,418	4,649	3,562	15,194
1977	45,060	54,229	8,047	3,916	42,266	13,757	13,704	3,218	4,443	19,113
1978 [6]	46,215	29,949	7,724	1,757	20,468	4,483	9,138	1,251	2,959	12,120
1979	42,261	37,248	8,816	1,964	26,468	6,643	9,937	1,640	4,482	14,547
1980	47,133	67,126	19,282	3,194	44,650	20,857	13,746	2,306	6,865	23,356
1981	46,134	65,434	25,491	1,697	38,246	14,696	13,075	2,386	5,871	29,406
1982	77,179	73,291	23,619	4,953	44,719	13,771	16,529	1,800	3,899	37,292
1983	83,348	102,406	45,228	7,693	49,485	22,958	12,749	4,007	5,527	57,165
1984	101,882	85,828	22,151	4,219	59,458	14,467	7,523	1,638	2,018	60,182
1985	203,954	129,085	36,432	6,374	86,279	25,751	10,014	4,036	4,153	85,131
1986: First three quarters	102,830	160,362	38,338	8,477	113,547	28,515	17,123	3,499	9,522	101,703
1985: I	21,848	21,511	8,752	849	11,910	3,878	1,478	520	799	14,836
II	34,790	30,534	9,421	1,734	19,379	5,659	2,768	1,731	575	19,801
III	38,888	34,640	10,266	2,038	22,336	8,219	2,356	867	687	22,511
IV	108,430	42,400	7,993	1,753	32,654	7,995	3,412	918	2,092	27,983
1986: I	12,406	54,658	14,336	3,289	37,033	10,035	5,607	1,837	4,419	32,760
II	36,921	64,157	13,024	2,767	48,366	12,174	6,845	1,368	3,209	40,561
III	53,503	41,547	10,978	2,421	28,148	6,306	4,671	294	1,894	28,382

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[1] Business securities offered include securities offered by corporate and non-corporate business enterprises such as limited partnerships. Beginning 1978 excludes private placements.

[2] Common stock combines the conventional ownership shares of corporate business and securities issued by non-corporate business, *e.g.*, limited partnership interests, voting trust certificates and condominium securities.

[3] Prior to 1948, also includes extractive, radio broadcasting, airline companies, commercial, and miscellaneous company issues.

[4] Prior to 1948, also includes telephone, street railway, and bus company issues.

[5] Prior to 1948, includes railroad issues only.

[6] Beginning 1978, business security offerings exclude private placements.

Note.—Covers substantially all new issues of State, municipal, and business securities offered for cash sale in the United States in amounts over $100,000 and with terms to maturity of more than 1 year; excludes notes issued exclusively to commercial banks, intercorporate transactions, and issues to be sold over an extended period; such as employee-purchase plans. Closed-end investment company issues are included beginning 1973.

Sources: Securities and Exchange Commission, "The Commercial and Financial Chronicle," and "The Bond Buyer."

TABLE B–91.—*Common stock prices and yields, 1949–86*

Year or month	Common stock prices [1]							Common stock yields (percent) [5]	
	New York Stock Exchange indexes (Dec. 31, 1965=50) [2]					Dow Jones industrial average [3]	Standard & Poor's composite index (1941–43=10) [4]	Dividend-price ratio [6]	Earnings-price ratio [7]
	Composite	Industrial	Transportation	Utility	Finance				
1949	9.02	....	....	....	....	179.48	15.23	6.59	15.48
1950	10.87	....	....	....	....	216.31	18.40	6.57	13.99
1951	13.08	....	....	....	....	257.64	22.34	6.13	11.82
1952	13.81	....	....	....	....	270.76	24.50	5.80	9.47
1953	13.67	....	....	....	....	275.97	24.73	5.80	10.26
1954	16.19	....	....	....	....	333.94	29.69	4.95	8.57
1955	21.54	....	....	....	....	442.72	40.49	4.08	7.95
1956	24.40	....	....	....	....	493.01	46.62	4.09	7.55
1957	23.67	....	....	....	....	475.71	44.38	4.35	7.89
1958	24.56	....	....	....	....	491.66	46.24	3.97	6.23
1959	30.73	....	....	....	....	632.12	57.38	3.23	5.78
1960	30.01	....	....	....	....	618.04	55.85	3.47	5.90
1961	35.37	....	....	....	....	691.55	66.27	2.98	4.62
1962	33.49	....	....	....	....	639.76	62.38	3.37	5.82
1963	37.51	....	....	....	....	714.81	69.87	3.17	5.50
1964	43.76	....	....	....	....	834.05	81.37	3.01	5.32
1965	47.39	....	....	....	....	910.88	88.17	3.00	5.59
1966	46.15	46.18	50.26	45.41	44.45	873.60	85.26	3.40	6.63
1967	50.77	51.97	53.51	45.43	49.82	879.12	91.93	3.20	5.73
1968	55.37	58.00	50.58	44.19	65.85	906.00	98.70	3.07	5.67
1969	54.67	57.44	46.96	42.80	70.49	876.72	97.84	3.24	6.08
1970	45.72	48.03	32.14	37.24	60.00	753.19	83.22	3.83	6.45
1971	54.22	57.92	44.35	39.53	70.38	884.76	98.29	3.14	5.41
1972	60.29	65.73	50.17	38.48	78.35	950.71	109.20	2.84	5.50
1973	57.42	63.08	37.74	37.69	70.12	923.88	107.43	3.06	7.12
1974	43.84	48.08	31.89	29.79	49.67	759.37	82.85	4.47	11.59
1975	45.73	50.52	31.10	31.50	47.14	802.49	86.16	4.31	9.15
1976	54.46	60.44	39.57	36.97	52.94	974.92	102.01	3.77	8.90
1977	53.69	57.86	41.09	40.92	55.25	894.63	98.20	4.62	10.79
1978	53.70	58.23	43.50	39.22	56.65	820.23	96.02	5.28	12.03
1979	58.32	64.76	47.34	38.20	61.42	844.40	103.01	5.47	13.46
1980	68.10	78.70	60.61	37.35	64.25	891.41	118.78	5.26	12.66
1981	74.02	85.44	72.61	38.91	73.52	932.92	128.05	5.20	11.96
1982	68.93	78.18	60.41	39.75	71.99	884.36	119.71	5.81	11.60
1983	92.63	107.45	89.36	47.00	95.34	1,190.34	160.41	4.40	8.03
1984	92.46	108.01	85.63	46.44	89.28	1,178.48	160.46	4.64	10.02
1985	108.09	123.79	104.11	56.75	114.21	1,328.23	186.84	4.25	8.12
1986	136.00	155.85	119.87	71.36	147.20	1,792.76	236.34	3.49	....
1985: Jan	99.11	113.99	94.88	51.95	101.34	1,238.16	171.61	4.51	....
Feb	104.73	120.71	101.76	53.44	109.58	1,283.23	180.88	4.30	....
Mar	103.92	119.64	98.30	53.91	107.59	1,268.83	179.42	4.37	9.07
Apr	104.66	119.93	96.47	55.51	109.39	1,266.36	180.62	4.37	....
May	107.00	121.88	99.66	57.32	115.31	1,279.40	184.90	4.31	....
June	109.52	124.11	105.79	59.61	118.47	1,314.00	188.89	4.21	8.14
July	111.64	126.94	111.67	59.68	119.85	1,343.17	192.54	4.14	....
Aug	109.09	124.92	109.92	56.99	114.68	1,326.18	188.31	4.23	....
Sept	106.62	122.35	104.96	55.93	110.21	1,317.95	184.06	4.32	8.36
Oct	107.57	123.65	103.72	55.84	112.36	1,351.58	186.18	4.28	....
Nov	113.93	130.53	108.61	59.07	122.83	1,432.88	197.45	4.06	....
Dec	119.33	136.77	113.52	61.69	128.86	1,517.02	207.26	3.88	6.91
1986: Jan	120.16	137.13	115.72	62.46	132.36	1,534.86	208.19	3.90	....
Feb	126.43	144.03	124.18	65.18	142.13	1,652.73	219.37	3.72	....
Mar	133.97	152.75	128.66	68.06	153.94	1,757.35	232.33	3.50	608
Apr	137.27	157.30	126.17	69.46	155.07	1,807.05	237.97	3.43	....
May	137.37	158.59	122.21	68.65	151.28	1,801.80	238.46	3.42	....
June	140.82	163.15	120.65	70.69	151.73	1,867.70	245.30	3.36	5.87
July	138.32	158.06	112.03	74.20	150.23	1,809.92	240.18	3.43	....
Aug	140.91	160.10	111.24	77.84	152.90	1,843.45	245.00	3.36	....
Sept	137.06	156.52	114.06	74.56	145.56	1,813.47	238.27	3.43	....
Oct	136.74	156.56	120.04	73.38	143.89	1,817.04	237.36	3.49	....
Nov	140.84	162.10	122.27	75.77	142.97	1,883.65	245.09	3.40	....
Dec	142.12	163.85	121.26	76.07	144.29	1,924.07	248.61	3.38	....

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[1] Averages of daily closing prices, except New York Stock Exchange data through May 1964 are averages of weekly closing prices.

[2] Includes all the stocks (more than 1,500) listed on the New York Stock Exchange.

[3] Includes 30 stocks.

[4] Includes 500 stocks.

[5] Standard & Poor's series, based on 500 stocks in the composite index.

[6] Aggregate cash dividends (based on latest known annual rate) divided by aggregate market value based on Wednesday closing prices. Monthly data are averages of weekly figures; annual data are averages of monthly figures.

[7] Quarterly data are ratio of earnings (after taxes) for 4 quarters ending with particular quarter to price index for last day of that quarter. Annual ratios are averages of quarterly ratios.

Note.—All data relate to stocks listed on the New York Stock Exchange.

Sources: New York Stock Exchange, Dow Jones & Co., Inc., and Standard & Poor's Corporation.

TABLE B-92.—*Business formation and business failures, 1945–86*

Year or month	Index of net business formation (1967=100)	New business incorporations (number)	Business failures[1]						
			Business failure rate[2]	Number of failures			Amount of current liabilities (millions of dollars)		
				Total	Liability size class		Total	Liability size class	
					Under $100,000	$100,000 and over		Under $100,000	$100,000 and over
1945			4.2	809	759	50	30.2	11.4	18.8
1946		132,916	5.2	1,129	1,003	126	67.3	15.7	51.6
1947		112,897	14.3	3,474	3,103	371	204.6	63.7	140.9
1948	101.1	96,346	20.4	5,250	4,853	397	234.6	93.9	140.7
1949	83.7	85,640	34.4	9,246	8,708	538	308.1	161.4	146.7
1950	87.7	93,092	34.3	9,162	8,746	416	248.3	151.2	97.1
1951	86.7	83,778	30.7	8,058	7,626	432	259.5	131.6	128.0
1952	90.8	92,946	28.7	7,611	7,081	530	283.3	131.9	151.4
1953	89.7	102,706	33.2	8,862	8,075	787	394.2	167.5	226.6
1954	88.8	117,411	42.0	11,086	10,226	860	462.6	211.4	251.2
1955	96.6	139,915	41.6	10,969	10,113	856	449.4	206.4	243.0
1956	94.6	141,163	48.0	12,686	11,615	1,071	562.7	239.8	322.9
1957	90.3	137,112	51.7	13,739	12,547	1,192	615.3	267.1	348.2
1958	90.2	150,781	55.9	14,964	13,499	1,465	728.3	297.6	430.7
1959	97.9	193,067	51.8	14,053	12,707	1,346	692.8	278.9	413.9
1960	94.5	182,713	57.0	15,445	13,650	1,795	938.6	327.2	611.4
1961	90.8	181,535	64.4	17,075	15,006	2,069	1,090.1	370.1	720.0
1962	92.6	182,057	60.8	15,782	13,772	2,010	1,213.6	346.5	867.1
1963	94.4	186,404	56.3	14,374	12,192	2,182	1,352.6	321.0	1,031.6
1964	98.2	197,724	53.2	13,501	11,346	2,155	1,329.2	313.6	1,015.6
1965	99.8	203,897	53.3	13,514	11,340	2,174	1,321.7	321.7	1,000.0
1966	99.3	200,010	51.6	13,061	10,833	2,228	1,385.7	321.5	1,064.1
1967	100.0	206,569	49.0	12,364	10,144	2,220	1,265.2	297.9	967.3
1968	108.3	233,635	38.6	9,636	7,829	1,807	941.0	241.1	699.9
1969	115.8	274,267	37.3	9,154	7,192	1,962	1,142.1	231.3	910.8
1970	108.8	264,209	43.8	10,748	8,019	2,729	1,887.8	269.3	1,618.4
1971	111.1	287,577	41.7	10,326	7,611	2,715	1,916.9	271.3	1,645.6
1972	119.3	316,601	38.3	9,566	7,040	2,526	2,000.2	258.8	1,741.5
1973	119.1	329,358	36.4	9,345	6,627	2,718	2,298.6	235.6	2,063.0
1974	113.2	319,149	38.4	9,915	6,733	3,182	3,053.1	256.9	2,796.3
1975	109.9	326,345	42.6	11,432	7,504	3,928	4,380.2	298.6	4,081.6
1976	120.4	375,766	34.8	9,628	6,176	3,452	3,011.3	257.8	2,753.4
1977	130.8	436,170	28.4	7,919	4,861	3,058	3,095.3	208.3	2,887.0
1978	138.1	478,019	23.9	6,619	3,712	2,907	2,656.0	164.7	2,491.3
1979	138.3	524,565	27.8	7,564	3,930	3,634	2,667.4	179.9	2,487.5
1980	129.9	533,520	42.1	11,742	5,682	6,060	4,635.1	272.5	4,362.6
1981	124.8	581,242	61.3	16,794	8,233	8,561	6,955.2	405.8	6,549.3
1982	116.4	566,942	89.0	24,908	11,509	13,399	15,610.8	541.7	15,069.1
1983	117.5	600,400	110.0	31,334	15,509	15,825	16,072.9	635.1	15,437.8
1984	121.3	634,991	107.0	52,078	19,618	32,460	29,268.6	409.8	28,858.8
1985	121.2	668,904	114.0	57,067	20,914	36,153	33,375.8	385.7	32,990.1
	Seasonally adjusted								
1985: Jan	121.4	53,266		3,675	1,325	2,350	1,872.0	25.3	1,846.7
Feb	122.7	54,533		4,226	1,445	2,781	2,378.4	27.8	2,350.6
Mar	122.0	55,764		5,768	1,755	4,013	3,790.7	33.4	3,757.3
Apr	121.6	55,866		4,586	1,464	3,122	3,279.8	29.2	3,250.6
May	119.6	56,124		5,914	1,769	4,145	3,261.9	35.5	3,226.4
June	120.2	55,339		4,388	1,508	2,880	2,995.6	27.5	2,968.1
July	122.4	53,926		4,185	1,505	2,680	2,150.5	27.3	2,123.2
Aug	121.5	55,418		5,468	1,779	3,689	3,162.4	29.3	3,133.1
Sept	121.3	55,999		4,146	1,533	2,613	1,925.3	26.6	1,898.7
Oct	121.5	57,576		4,767	2,240	2,527	1,824.6	41.6	1,783.0
Nov	120.5	57,320		5,776	2,719	3,057	5,026.9	48.2	4,978.7
Dec	119.5	57,785		4,168	1,872	2,296	1,707.8	34.1	1,673.7
1986: Jan	118.4	57,452							
Feb	121.2	61,062							
Mar	121.8	59,020							
Apr	123.1	59,880							
May	119.9	55,886							
June	119.5	56,894							
July	121.6	57,789							
Aug	119.5	55,647							
Sept	120.9	57,310							
Oct	120.1	57,211							
Nov	119.7	56,453							

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[1] Commercial and industrial failures only through 1983, excluding failures of banks, railroads, real estate, insurance, holding, and financial companies, steamship lines, travel agencies, etc.

Data for 1984–85 based on expanded coverage and new methodology and are therefore not generally comparable with earlier data. Data for 1985 are subject to revision due to amended court filings.

[2] Failure rate per 10,000 listed enterprises.

Sources: Department of Commerce (Bureau of Economic Analysis) and The Dun & Bradstreet Corporation.

AGRICULTURE

TABLE B–93.—*Farm income, 1929–86*

[Billions of dollars; quarterly data at seasonally adjusted annual rates]

Year or quarter	Income of farm operators from farming							
	Gross farm income					Production expenses	Net farm income	
	Total [1]	Cash marketing receipts			Value of inventory changes [2]		Current dollars	1982 dollars [3]
		Total	Livestock and products	Crops				
1929	13.8	11.3	6.2	5.1	−0.1	7.7	6.2	42.1
1933	6.9	5.3	2.8	2.5	−.2	4.4	2.6	22.8
1939	10.7	7.9	4.5	3.3	.1	6.3	4.4	34.8
1940	11.3	8.4	4.9	3.5	.3	6.9	4.5	34.5
1941	14.3	11.1	6.5	4.6	.4	7.8	6.5	47.0
1942	19.9	15.6	9.0	6.5	1.1	10.0	9.9	67.0
1943	23.3	19.6	11.5	8.1	−.1	11.6	11.7	77.7
1944	24.0	20.5	11.4	9.2	−.4	12.3	11.7	76.5
1945	25.4	21.7	12.0	9.7	−.4	13.1	12.3	78.4
1946	29.6	24.8	13.8	11.0	.0	14.5	15.1	77.7
1947	32.4	29.6	16.5	13.1	−1.8	17.0	15.4	69.5
1948	36.5	30.2	17.1	13.1	1.7	18.8	17.7	74.8
1949	30.8	27.8	15.4	12.4	−.9	18.0	12.8	54.4
1950	33.1	28.5	16.1	12.4	.8	19.5	13.6	57.1
1951	38.3	32.9	19.6	13.2	1.2	22.3	15.9	63.5
1952	37.8	32.5	18.2	14.3	.9	22.8	15.0	58.7
1953	34.4	31.0	16.9	14.1	−.6	21.5	13.0	50.1
1954	34.2	29.8	16.3	13.6	.5	21.8	12.4	47.0
1955	33.5	29.5	16.0	13.5	.2	22.2	11.3	41.6
1956	34.0	30.4	16.4	14.0	−.5	22.7	11.3	40.1
1957	34.8	29.7	17.4	12.3	.6	23.7	11.1	38.1
1958	39.0	33.5	19.2	14.2	.8	25.8	13.2	44.3
1959	37.9	33.6	18.9	14.7	.0	27.2	10.7	35.2
1960	38.6	34.0	19.0	15.0	.4	27.4	11.2	36.3
1961	40.5	35.2	19.5	15.7	.3	28.6	12.0	38.3
1962	42.3	36.5	20.2	16.3	.6	30.3	12.1	37.8
1963	43.4	37.5	20.0	17.4	.6	31.6	11.8	36.3
1964	42.3	37.3	19.9	17.4	−.8	31.8	10.5	31.9
1965	46.5	39.4	21.9	17.5	1.0	33.6	12.9	38.2
1966	50.5	43.4	25.0	18.4	−.1	36.5	14.0	39.9
1967	50.5	42.8	24.4	18.4	.7	38.2	12.3	34.4
1968	51.8	44.2	25.5	18.7	.1	39.5	12.3	32.7
1969	56.4	48.2	28.6	19.6	.1	42.1	14.3	35.9
1970	58.8	50.5	29.5	21.0	.0	44.5	14.4	34.2
1971	62.1	52.7	30.5	22.3	1.4	47.1	15.0	33.8
1972	71.1	61.1	35.6	25.5	.9	51.7	19.5	41.8
1973	98.9	86.9	45.8	41.1	3.4	64.6	34.4	69.4
1974	98.2	92.4	41.3	51.1	−1.6	71.0	27.3	50.5
1975	100.6	88.9	43.1	45.8	3.4	75.0	25.5	43.1
1976	102.9	95.4	46.3	49.0	−1.5	82.7	20.2	32.0
1977	108.8	96.2	47.6	48.6	1.1	88.9	19.9	29.5
1978	128.4	112.4	59.2	53.2	1.9	103.2	25.2	34.9
1979	150.7	131.5	69.2	62.3	5.0	123.3	27.4	34.9
1980	149.3	139.7	68.0	71.7	−6.3	133.1	16.1	18.8
1981	166.3	141.6	69.2	72.5	6.5	139.4	26.9	28.6
1982	163.4	142.6	70.2	72.4	−1.3	140.7	22.7	22.7
1983	152.4	136.5	69.5	67.0	−10.9	139.5	13.0	12.5
1984	174.4	142.2	72.9	69.2	6.3	141.7	32.7	30.2
1985	166.6	142.1	69.4	72.7	−1.1	136.1	30.5	27.3
1984: I	174.4	136.5	75.6	60.9	1.7	141.6	32.7	30.7
II	168.0	141.2	71.4	69.8	7.0	142.2	25.8	23.9
III	173.8	144.1	71.6	72.5	9.0	142.0	31.8	29.3
IV	181.4	146.8	73.1	73.8	7.5	140.9	40.5	36.9
1985: I	170.7	137.3	69.2	68.1	3.0	139.0	31.7	28.7
II	164.7	135.1	67.8	67.4	−.3	137.1	27.6	24.8
III	157.4	139.8	68.0	71.8	−2.6	135.2	22.2	19.8
IV	173.5	156.2	72.6	83.6	−4.5	133.2	40.3	35.7
1986: I	145.6	129.1	65.6	63.5	−2.9	131.2	14.4	12.6
II	165.1	127.9	67.0	60.9	−2.8	129.4	35.7	31.5
III	141.7	124.4	76.4	48.0	−2.5	127.7	14.0	12.2

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[1] Cash marketing receipts and inventory changes plus Government payments, other farm cash income, and nonmoney income furnished by farms.

[2] Physical changes in end-of-period inventory of crop and livestock commodities valued at average prices during the period.

[3] Income in current dollars divided by the GNP implicit price deflator (Department of Commerce).

Note.—Data include net Commodity Credit Corporation loans and operator households.

Source: Department of Agriculture, except as noted.

TABLE B-94.—*Farm output and productivity indexes, 1947–86*

[1977=100]

Year	Farm output						Productivity indicators				
		Crops[2]							Farm output per hour of farm work		
	Total[1]	Total[3]	Feed grains	Food grains	Oil crops	Live-stock and prod-ucts[2]	Farm output per unit of total input	Crop produc-tion per acre[4]	Total	Crops	Live-stock and prod-ucts
1947	58	56	39	64	22	65	55	57	16	18	17
1948	63	64	57	62	27	64	60	64	18	20	18
1949	62	61	50	53	26	67	57	60	19	20	18
1950	61	59	51	49	26	70	58	59	19	22	19
1951	63	60	47	49	26	73	60	59	20	22	20
1952	66	62	50	63	26	74	62	62	22	24	21
1953	66	62	49	57	26	74	64	62	23	25	22
1954	66	61	51	51	28	77	65	61	24	26	23
1955	69	63	54	48	30	79	66	63	26	28	24
1956	69	63	54	50	34	79	67	64	28	30	25
1957	67	62	58	47	33	78	67	65	29	33	26
1958	73	69	64	69	39	79	74	73	33	38	28
1959	74	68	66	55	36	83	73	72	35	37	31
1960	76	72	69	66	38	82	76	77	37	41	32
1961	76	70	62	60	43	86	78	78	39	42	35
1962	77	71	62	56	44	86	78	81	41	45	37
1963	80	74	68	59	46	89	82	83	45	47	40
1964	79	72	59	65	46	91	81	81	47	49	43
1965	82	76	70	67	53	89	84	85	52	56	45
1966	79	73	70	67	55	91	83	83	53	59	49
1967	83	77	79	76	56	94	85	86	58	63	53
1968	85	79	75	80	64	94	87	89	62	66	55
1969	85	80	78	74	65	95	88	91	63	68	59
1970	84	77	71	69	66	99	87	88	66	70	64
1971	92	86	92	81	68	100	95	96	74	79	68
1972	91	87	88	77	74	101	94	99	78	84	73
1973	93	92	91	86	87	99	95	99	81	87	76
1974	88	84	74	91	71	100	90	88	79	80	82
1975	95	93	91	108	86	95	99	96	89	89	85
1976	97	92	96	107	74	99	98	94	94	91	93
1977	100	100	100	100	100	100	100	100	100	100	100
1978	104	102	108	93	105	101	101	105	108	105	109
1979	111	113	116	108	129	105	105	113	119	118	117
1980	104	101	97	121	99	108	101	100	112	105	129
1981	118	117	121	144	114	109	116	115	131	121	136
1982	116	117	122	138	121	107	116	116	133	124	143
1983	96	88	67	117	91	109	98	100	120	105	154
1984	112	111	116	129	106	107	115	112	139	123	162
1985	119	117	134	121	117	110	127	119	150	136	175
1986[p]	113	108	122	106	110	111	....	115	....	....	....

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[1] Farm output measures the annual volume of net farm production available for eventual human use through sales from farms or consumption in farm households.

[2] Gross production.

[3] Includes items not included in groups shown.

[4] Computed from variable weights for individual crops produced each year.

Source: Department of Agriculture.

TABLE B-95.—*Farm input use, selected inputs, 1947-86*

Year	Farm population April[1]		Farm employment (thousands)[3]			Crops harvested (millions of acres)[4]	Selected indexes of input use (1977=100)					
	Number (thousands)	As percent of total population[2]	Total	Family workers	Hired workers		Total	Farm labor	Farm real estate	Mechanical power and machinery	Agricultural chemicals[5]	Feed, seed, and livestock purchases[6]
1947	25,829	17.9	10,382	8,115	2,267	355	104	297	106	54	15	51
1948	24,383	16.6	10,363	8,026	2,337	356	104	285	107	62	16	52
1949	24,194	16.2	9,964	7,712	2,252	360	108	285	108	68	18	56
1950	23,048	15.2	9,926	7,597	2,329	345	106	265	109	72	19	58
1951	21,890	14.2	9,546	7,310	2,236	344	106	251	109	77	21	62
1952	21,748	13.9	9,149	7,005	2,144	349	105	237	108	81	23	63
1953	19,874	12.5	8,864	6,775	2,089	348	103	220	108	82	24	63
1954	19,019	11.7	8,651	6,570	2,081	346	102	214	108	82	24	65
1955	19,078	11.5	8,381	6,345	2,036	340	104	220	108	83	26	66
1956	18,712	11.1	7,852	5,900	1,952	324	103	212	106	84	27	69
1957	17,656	10.3	7,600	5,660	1,940	324	100	196	105	83	27	68
1958	17,128	9.8	7,503	5,521	1,982	324	98	182	104	83	28	73
1959	16,592	9.3	7,342	5,390	1,952	324	101	183	105	84	32	77
1960	15,635	8.7	7,057	5,172	1,885	324	99	177	103	83	32	77
1961	14,803	8.1	6,919	5,029	1,890	302	98	167	103	80	35	81
1962	14,313	7.7	6,700	4,873	1,827	295	98	163	104	80	38	83
1963	13,367	7.1	6,518	4,738	1,780	298	98	155	104	79	43	83
1964	12,954	6.7	6,110	4,506	1,604	298	98	148	104	80	46	85
1965	12,363	6.4	5,610	4,128	1,482	298	97	144	103	80	49	86
1966	11,595	5.9	5,214	3,854	1,360	294	96	132	102	82	56	89
1967	10,875	5.5	4,903	3,650	1,253	306	98	128	104	85	66	92
1968	10,454	5.2	4,749	3,535	1,213	300	97	124	102	86	69	89
1969	10,307	5.1	4,596	3,419	1,176	290	96	118	102	86	73	93
1970	9,712	4.7	4,523	3,348	1,175	293	96	112	105	85	75	96
1971	9,425	4.5	4,436	3,275	1,161	305	97	108	103	87	81	102
1972	9,610	4.6	4,373	3,228	1,146	294	97	110	102	86	86	104
1973	9,472	4.5	4,337	3,169	1,168	321	98	109	100	90	90	107
1974	9,264	4.3	4,389	3,075	1,314	328	98	109	99	92	92	99
1975	8,864	4.1	4,342	3,026	1,317	336	97	106	97	96	83	93
1976	8,253	3.8	4,374	2,997	1,377	337	98	100	98	98	96	101
1977	[7]6,194	[7]2.8	4,155	2,859	1,296	345	100	100	100	100	100	100
1978	[7]6,501	[7]2.9	3,957	2,689	1,268	338	102	100	100	104	107	103
1979	[7]6,241	[7]2.8	3,774	2,501	1,273	348	105	99	103	104	123	115
1980	[7]6,051	[7]2.7	3,705	2,402	1,303	352	103	96	103	101	123	114
1981	[7]5,790	[7]2.5	[8]3,641	[8]2,324	[8]1,317	366	102	96	103	98	129	108
1982	[7]5,620	[7]2.4	3,578	2,248	1,330	362	100	93	103	94	118	106
1983	[7]5,787	[7]2.5	3,518	2,174	1,344	306	97	97	101	90	105	108
1984	5,754	2.4	3,461	2,103	1,358	348	98	98	99	88	121	104
1985	5,355	2.2	3,365	2,018	[9]1,347	343	94	84	97	83	123	110
1986 p	....	....	3,138	1,873	[9]1,265	....	....	....	....	....	....	....

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[1] Farm population as defined by Department of Agriculture and Department of Commerce, i.e., civilian population living on farms in rural areas, regardless of occupation. See also footnote 7.

[2] Total population of United States including Armed Forces overseas, as of July 1.

[3] Includes persons doing farmwork on all farms. These data, published by the Department of Agriculture, differ from those on agricultural employment by the Department of Labor (see Table B-31) because of differences in the method of approach, in concepts of employment, and in time of month for which the data are collected.

[4] Acreage harvested plus acreages in fruits, tree nuts, and farm gardens.

[5] Fertilizer, lime, and pesticides.

[6] Nonfarm constant dollar value of feed, seed, and livestock purchases.

[7] Based on new definition of a farm. Under old definition of a farm, farm population (in thousands and as percent of total population) for 1977, 1978, 1979, 1980, 1981, 1982, and 1983 is 7,806 and 3.6; 8,005 and 3.6; 7,553 and 3.4; 7,241 and 3.2; 6,942 and 3.0; 6,870 and 3.0; 7,029 and 3.0, respectively.

[8] Basis for farm employment series was discontinued for 1981 through 1984. Employment is estimated for these years.

[9] Includes agricultural service workers working on farms.

Note.—Population includes Alaska and Hawaii beginning 1960.

Sources: Department of Agriculture and Department of Commerce (Bureau of the Census).

TABLE B-96.—*Indexes of prices received and prices paid by farmers, 1946–86*

[1977 = 100]

Year or month	Prices received by farmers			Prices paid by farmers						Addendum: Average farm real estate value per acre[3]
	All farm products	Crops	Livestock and products	All commodities, services, interest, taxes, and wage rates[1]	Production items				Wage rates	
					Total[2]	Tractors and self-propelled machinery	Fertilizer	Fuels and energy		
1946	52	53	50	30	33	....	45	....	20	11
1947	60	61	60	35	39	....	50	....	22	13
1948	63	59	65	38	43	....	55	....	23	14
1949	55	52	56	36	41	....	56	....	22	14
1950	56	54	58	37	42	....	54	....	22	14
1951	66	61	70	41	47	....	57	....	25	16
1952	63	62	64	42	47	....	59	....	26	18
1953	56	55	56	40	44	....	59	....	27	18
1954	54	56	52	40	44	....	59	....	27	18
1955	51	53	49	40	43	....	58	....	27	19
1956	50	54	47	40	43	....	57	....	28	19
1957	51	52	51	42	44	....	58	....	29	21
1958	55	52	57	43	46	....	58	....	30	22
1959	53	51	53	43	46	....	57	....	32	23
1960	52	51	53	44	46	....	57	....	33	24
1961	53	52	52	44	46	....	58	....	33	25
1962	53	54	53	45	47	....	58	....	34	26
1963	53	55	51	45	47	....	57	....	35	27
1964	52	55	49	45	47	....	57	....	36	29
1965	54	53	54	47	48	39	57	49	38	31
1966	58	55	60	49	50	40	56	49	41	33
1967	55	52	57	49	50	42	55	50	44	35
1968	56	52	60	51	50	44	52	50	48	38
1969	59	50	67	53	52	47	48	51	53	40
1970	60	52	67	55	54	49	48	52	57	42
1971	62	56	67	58	57	51	50	53	59	43
1972	69	60	77	62	61	54	52	54	63	47
1973	98	91	104	71	73	58	56	57	69	53
1974	105	117	94	81	83	68	92	79	79	66
1975	101	105	98	89	91	82	120	88	85	75
1976	102	102	101	95	97	91	102	93	93	86
1977	100	100	100	100	100	100	100	100	100	100
1978	115	105	124	108	108	109	100	105	107	109
1979	132	116	147	123	125	122	108	137	117	125
1980	134	125	144	138	138	136	134	188	126	145
1981	139	134	143	151	148	152	144	213	137	158
1982	133	121	145	157	150	165	144	210	144	157
1983	135	128	141	161	153	174	137	202	147	148
1984	142	139	146	164	155	181	143	201	151	146
1985	128	120	136	163	151	178	135	201	154	128
1986	123	106	138	161	146	174	124	165	159	112
1985: Jan	135	126	144	164	154	182	139	195	154	....
Feb	134	123	145	164	154	182	139	192	....	....
Mar	134	127	141	164	153	180	137	195	....	....
Apr	131	126	136	164	153	180	137	201	158	128
May	130	126	134	164	152	180	135	203	....	....
June	129	123	134	164	151	177	135	204	....	....
July	126	121	130	163	150	177	135	204	154	....
Aug	121	114	128	162	149	177	135	203	....	....
Sept	120	112	128	162	148	174	135	203	....	....
Oct	123	111	134	162	148	174	130	202	150	....
Nov	127	114	138	162	149	174	130	205	....	....
Dec	128	118	137	162	149	174	128	206	....	....
1986: Jan	124	113	135	163	150	174	128	203	150	....
Feb	122	111	133	163	149	174	128	188	....	112
Mar	122	111	132	....	....	....	....	....	....	....
Apr	121	114	127	161	146	175	125	160	164	....
May	123	114	131	....	....	....	....	....	....	....
June	121	109	133	....	....	....	....	....	....	....
July	125	105	143	161	145	175	125	155	166	....
Aug	125	101	149	....	....	....	....	....	....	....
Sept	122	97	146	....	....	....	....	....	....	....
Oct	121	97	145	160	143	172	116	154	159	....
Nov	124	102	145	....	....	....	....	....	....	....
Dec	121	99	141	....	....	....	....	....	....	....

[1] Includes items used for family living, not shown separately.

[2] Includes other items not shown separately.

[3] Average for 48 States. Annual data are for March 1 of each year through 1975, for February 1 for 1976 through 1981, for April 1 for 1982 through 1985, and for February 1 for 1986.

Source: Department of Agriculture.

TABLE B–97.—*U.S. exports and imports of agricultural commodities, 1940–86*

[Billions of dollars]

Year	Exports							Imports					Agricultural trade balance
	Total [1]	Feed grains	Food grains [2]	Oilseeds and products	Cotton	Tobacco	Animals and products	Total [1]	Crops, fruits, and vegetables [3]	Animals and products	Coffee	Cocoa beans and products	
1940	0.5	(4)	(4)	(4)	0.2	(4)	0.1	1.3	(4)	0.2	0.1	(4)	−0.8
1941	.7	(4)	0.1	(4)	.1	0.1	.3	1.7	0.1	.3	.2	(4)	−1.0
1942	1.2	(4)	(4)	(4)	.1	.1	.8	1.3	(4)	.5	.2	(4)	−.1
1943	2.1	(4)	.1	0.1	.2	.2	1.2	1.5	.1	.4	.3	(4)	.6
1944	2.1	(4)	.1	.1	.1	.1	1.3	1.8	.1	.3	.3	(4)	.3
1945	2.3	(4)	.4	(4)	.3	.2	.9	1.7	.1	.4	.3	(4)	.5
1946	3.1	0.1	.7	(4)	.5	.4	.9	2.3	.2	.4	.5	0.1	.8
1947	4.0	.4	1.4	.1	.4	.3	.7	2.8	.1	.4	.6	.2	1.2
1948	3.5	.1	1.5	.2	.5	.2	.5	3.1	.2	.6	.7	.2	.3
1949	3.6	.3	1.1	.3	.9	.3	.4	2.9	.2	.4	.8	.1	.7
1950	2.9	.2	.6	.2	1.0	.3	.3	4.0	.2	.7	1.1	.2	−1.1
1951	4.0	.3	1.1	.3	1.1	.3	.5	5.2	.2	1.1	1.4	.2	−1.1
1952	3.4	.3	1.1	.2	.9	.2	.3	4.5	.2	.7	1.4	.2	−1.1
1953	2.8	.3	.7	.2	.5	.3	.4	4.2	.2	.6	1.5	.2	−1.3
1954	3.1	.2	.5	.3	.8	.3	.5	4.0	.2	.5	1.5	.3	−.9
1955	3.2	.3	.6	.4	.5	.4	.6	4.0	.2	.5	1.4	.2	−.8
1956	4.2	.4	1.0	.5	.7	.3	.7	4.0	.2	.4	1.4	.2	.2
1957	4.5	.3	1.0	.5	1.0	.4	.7	4.0	.2	.5	1.4	.2	.6
1958	3.9	.5	.8	.4	.7	.4	.5	3.9	.2	.7	1.2	.2	(4)
1959	4.0	.6	.9	.6	.4	.3	.6	4.1	.2	.8	1.1	.2	−.1
1960	4.8	.5	1.2	.6	1.0	.4	.6	3.8	.2	.6	1.0	.2	1.0
1961	5.0	.5	1.4	.6	.9	.4	.6	3.7	.2	.7	1.0	.2	1.3
1962	5.0	.8	1.3	.7	.5	.4	.6	3.9	.2	.9	1.0	.2	1.2
1963	5.6	.8	1.5	.8	.6	.4	.7	4.0	.3	.9	1.0	.2	1.6
1964	6.3	.9	1.7	1.0	.7	.4	.8	4.1	.3	.8	1.2	.2	2.3
1965	6.2	1.1	1.4	1.2	.5	.4	.8	4.1	.3	.9	1.1	.1	2.1
1966	6.9	1.3	1.8	1.2	.4	.5	.7	4.5	.4	1.2	1.1	.1	2.4
1967	6.4	1.1	1.5	1.3	.5	.5	.7	4.5	.4	1.1	1.0	.2	1.9
1968	6.3	.9	1.4	1.3	.5	.5	.7	5.0	.5	1.3	1.2	.2	1.3
1969	6.0	.9	1.2	1.3	.3	.6	.8	5.0	.5	1.4	.9	.2	1.1
1970	7.3	1.1	1.4	1.9	.4	.5	.9	5.8	.5	1.6	1.2	.3	1.5
1971	7.7	1.0	1.3	2.2	.6	.5	1.0	5.8	.6	1.5	1.2	.2	1.9
1972	9.4	1.5	1.8	2.4	.5	.7	1.1	6.5	.7	1.8	1.3	.2	2.9
1973	17.7	3.5	4.7	4.3	.9	.7	1.6	8.4	.8	2.6	1.7	.3	9.3
1974	21.9	4.6	5.4	5.7	1.3	.8	1.8	10.2	.8	2.2	1.6	.5	11.7
1975	21.9	5.2	6.2	4.5	1.0	.9	1.7	9.3	.8	1.8	1.7	.5	12.6
1976	23.0	6.0	4.7	5.1	1.0	.9	2.4	11.0	.9	2.3	2.9	.6	12.0
1977	23.6	4.9	3.6	6.6	1.5	1.1	2.7	13.4	1.2	2.3	4.2	1.0	10.2
1978	29.4	5.9	5.5	8.2	1.7	1.4	3.0	14.8	1.5	3.1	4.0	1.4	14.6
1979	34.7	7.7	6.3	8.9	2.2	1.2	3.8	16.7	1.7	3.9	4.2	1.2	18.0
1980	41.2	9.8	7.9	9.4	2.9	1.3	3.8	17.4	1.6	3.8	4.2	.9	23.9
1981	43.3	9.4	9.6	9.6	2.3	1.5	4.2	16.8	2.0	3.5	2.9	.9	26.6
1982	36.6	6.4	7.9	9.1	2.0	1.5	3.9	15.3	2.3	3.7	2.9	.7	21.3
1983	36.1	7.3	7.4	8.7	1.8	1.5	3.8	16.6	2.3	3.8	2.8	.8	19.5
1984	37.8	8.1	7.5	8.4	2.4	1.5	4.2	19.3	3.1	4.1	3.3	1.1	18.5
1985	29.0	6.0	4.5	5.8	1.6	1.5	4.1	20.0	3.5	4.2	3.3	1.4	9.1
Jan–Nov:													
1985	26.4	5.5	4.1	5.0	1.6	1.3	3.8	18.1	2.4	3.8	3.0	1.2	8.3
1986	23.5	2.8	3.6	5.8	.6	1.0	4.1	19.5	2.6	4.1	4.3	1.0	4.0

[1] Total includes items not shown separately.

[2] Rice, wheat, and wheat flour.

[3] Includes nuts, fruits, and vegetable preparations.

[4] Less than $50 million.

Note.—Data derived from official estimates released by the Bureau of the Census, Department of Commerce. Agricultural commodities are defined as (1) nonmarine food products and (2) other products of agriculture which have not passed through complex processes of manufacture. Export value, at U.S. port of exportation, is based on the selling price and includes inland freight, insurance, and other charges to the port. Import value, defined generally as the market value in the foreign country, excludes import duties, ocean freight, and marine insurance.

Source: Department of Agriculture.

TABLE B-98.—*Balance sheet of the farm sector, 1939–86*

[Billions of dollars]

End of year	Assets									Claims			
	Total	Real estate	Livestock [1]	Other physical assets			Financial assets			Total	Real estate debt	Other debt	Proprietors' equities
				Machinery and motor vehicles	Crops [2]	Household equipment and furnishings	Deposits and currency	U.S. savings bonds	Investments in cooperatives				
1939	53.0	33.6	5.1	3.1	2.7	4.2	3.2	0.2	0.8	53.0	6.6	3.4	43.0
1940	54.8	34.4	5.3	3.2	3.0	4.1	3.5	.3	.9	54.8	6.5	4.0	44.3
1941	62.9	37.5	7.1	4.0	3.8	4.8	4.2	.5	.9	62.9	6.4	4.1	52.4
1942	73.6	41.6	9.6	4.9	5.1	4.8	5.4	1.1	1.0	73.6	6.0	3.9	63.7
1943	84.0	48.2	9.7	5.4	6.1	4.7	6.6	2.2	1.1	84.0	5.4	3.5	75.1
1944	93.8	53.9	9.0	6.5	6.7	5.2	7.9	3.4	1.2	93.8	4.9	3.4	85.4
1945	102.9	61.0	9.7	5.4	6.3	5.5	9.4	4.1	1.4	102.9	4.8	3.1	95.0
1946	115.9	68.5	11.9	5.3	7.1	7.2	10.2	4.2	1.5	115.9	4.9	3.5	107.5
1947	127.4	73.7	13.3	7.4	9.0	8.1	9.9	4.4	1.7	127.4	5.1	4.2	118.1
1948	134.6	76.6	14.4	10.1	8.6	8.9	9.6	4.6	1.9	134.6	5.3	6.1	123.3
1949	134.5	77.6	12.9	12.2	7.6	8.4	9.1	4.7	2.1	134.5	5.6	6.9	122.1
1950	154.3	89.5	17.1	14.1	7.9	9.6	9.1	4.7	2.3	154.3	6.1	6.9	141.2
1951	170.1	98.5	19.5	16.7	8.8	10.1	9.4	4.7	2.5	170.1	6.7	8.0	155.5
1952	167.6	100.1	14.8	17.4	9.0	9.5	9.4	4.6	2.7	167.6	7.2	8.9	151.5
1953	164.5	98.7	11.7	18.4	9.1	9.5	9.4	4.7	2.8	164.5	7.7	9.2	147.6
1954	168.9	102.2	11.2	18.7	9.6	9.7	9.4	5.0	3.0	168.9	8.2	9.4	151.2
1955	173.6	107.5	10.6	19.3	8.3	10.0	9.5	5.2	3.2	173.6	9.0	9.8	154.8
1956	182.7	115.7	11.0	20.2	8.3	9.6	9.4	5.1	3.4	182.7	9.8	9.5	163.4
1957	191.3	121.7	13.9	20.1	7.6	9.6	9.5	5.1	3.7	191.3	10.4	10.0	170.8
1958	208.4	131.1	17.7	21.8	9.3	9.4	10.0	5.2	3.9	208.4	11.1	12.5	184.7
1959	210.2	137.2	15.2	22.7	7.7	9.2	9.2	4.7	4.2	210.2	12.1	12.7	185.4
1960	210.9	138.5	15.6	22.2	8.0	8.7	8.7	4.6	4.5	210.9	12.8	13.4	184.7
1961	219.3	144.5	16.4	22.5	8.8	8.9	8.8	4.5	4.8	219.3	13.9	14.6	190.9
1962	227.6	150.2	17.3	23.5	9.3	8.8	9.2	4.4	5.0	227.6	15.2	16.2	196.2
1963	235.7	158.6	15.9	23.9	9.8	8.8	9.2	4.2	5.4	235.7	16.8	18.1	200.8
1964	243.8	167.5	14.5	24.8	9.2	8.4	9.6	4.2	5.6	243.8	18.9	17.9	207.0
1965	260.8	179.2	17.6	26.0	9.7	8.4	10.0	4.0	5.9	260.8	21.2	19.5	220.1
1966	274.2	189.1	19.0	27.4	10.0	8.3	10.3	3.9	6.2	274.2	23.1	20.9	230.2
1967	288.0	199.7	18.8	29.8	9.6	8.8	10.9	3.8	6.5	288.0	25.1	22.3	240.6
1968	302.8	209.2	20.2	31.3	10.6	9.4	11.5	3.7	6.8	302.8	27.4	23.1	252.3
1969	314.9	215.8	23.5	32.3	10.9	9.6	11.9	3.7	7.2	314.9	29.2	23.8	261.9
1970	326.0	223.2	23.7	34.4	10.7	10.0	12.4	3.6	8.0	326.0	30.3	24.1	271.5
1971	351.8	239.6	27.3	36.6	11.8	10.8	13.1	3.7	8.8	351.8	32.2	27.4	292.2
1972	394.8	267.4	34.1	39.3	14.5	11.9	14.0	4.0	9.8	394.8	35.1	29.8	330.0
1973	478.6	327.8	42.4	44.2	22.0	12.3	14.9	4.2	10.9	478.6	39.5	33.8	405.2
1974 [3]	502.7	359.7	24.5	54.7	23.3	11.2	14.0	3.8	11.4	502.7	44.7	37.1	420.9
1975	576.4	418.2	29.4	64.0	21.3	11.7	14.5	3.9	13.4	576.4	49.7	42.0	484.7
1976	664.3	496.4	29.0	71.0	22.1	12.1	14.8	3.8	14.9	664.3	55.3	48.8	560.2
1977	736.6	554.8	31.9	76.9	24.8	13.7	15.1	3.9	15.4	736.6	63.5	59.5	613.6
1978	873.2	654.7	51.3	85.1	28.0	16.0	15.5	4.2	18.3	873.2	71.6	69.5	732.1
1979	1,015.3	765.7	61.4	96.7	33.5	17.2	15.9	4.0	20.8	1,015.3	85.6	80.5	849.3
1980	1,108.4	846.6	60.6	102.5	36.5	19.4	16.2	3.8	22.8	1,108.4	95.6	86.6	926.2
1981	1,111.1	846.7	53.5	108.8	36.1	20.8	16.7	3.6	24.8	1,111.1	105.8	96.2	909.1
1982	1,082.0	808.7	53.0	108.8	40.6	23.0	17.4	3.5	27.2	1,082.0	110.0	107.2	864.9
1983	1,061.7	798.0	49.7	105.8	33.3	24.4	18.2	3.6	28.8	1,061.7	112.6	103.6	845.5
1984	955.8	693.7	49.6	99.4	33.8	26.1	19.8	3.7	29.7	955.8	111.6	100.7	743.5
1985	866.8	607.5	45.9	97.6	37.1	26.1	21.1	3.9	27.7	866.8	105.4	99.5	661.9
1986 p	798.1	552.8	44.8	94.0	28.9	26.8	20.3	3.8	26.7	798.1	99.9	98.5	599.6

[1] Beginning with 1959, horses and mules are excluded.

[2] Includes all crops held on farms and crops held off farms by farmers as security for Commodity Credit Corporation loans.

[3] Beginning 1974, data are for farms included in the new farm definition, that is, places with sales of $1,000 or more annually.

Note.—Data include operator households. Beginning 1959, data include Alaska and Hawaii.

Source: Department of Agriculture.

Table B–99.—*U.S. international transactions, 1946–86*

[Millions of dollars; quarterly data seasonally adjusted, except as noted. Credits (+), debits (−)]

Year or quarter	Merchandise[1, 2]			Investment income[3]			Net military transactions	Net travel and transportation receipts	Other services, net[3]	Balance on goods and services[1, 4]	Remittances, pensions, and other unilateral transfers[1]	Balance on current account[1, 4]
	Exports	Imports	Net	Receipts	Payments	Net						
1946	11,764	−5,067	6,697	772	−212	560	−493	733	310	7,807	−2,922	4,885
1947	16,097	−5,973	10,124	1,102	−245	857	−455	946	145	11,617	−2,625	8,992
1948	13,265	−7,557	5,708	1,921	−437	1,484	−799	374	175	6,942	−4,525	2,417
1949	12,213	−6,874	5,339	1,831	−476	1,355	−621	230	208	6,511	−5,638	873
1950	10,203	−9,081	1,122	2,068	−559	1,509	−576	−120	242	2,177	−4,017	−1,840
1951	14,243	−11,176	3,067	2,633	−583	2,050	−1,270	298	254	4,399	−3,515	884
1952	13,449	−10,838	2,611	2,751	−555	2,196	−2,054	83	309	3,145	−2,531	614
1953	12,412	−10,975	1,437	2,736	−624	2,112	−2,423	−238	307	1,195	−2,481	−1,286
1954	12,929	−10,353	2,576	2,929	−582	2,347	−2,460	−269	305	2,499	−2,280	219
1955	14,424	−11,527	2,897	3,406	−676	2,730	−2,701	−297	299	2,928	−2,498	430
1956	17,556	−12,803	4,753	3,837	−735	3,102	−2,788	−361	447	5,153	−2,423	2,730
1957	19,562	−13,291	6,271	4,180	−796	3,384	−2,841	−189	482	7,107	−2,345	4,762
1958	16,414	−12,952	3,462	3,790	−825	2,965	−3,135	−633	486	3,145	−2,361	784
1959	16,458	−15,310	1,148	4,132	−1,061	3,071	−2,805	−821	573	1,166	−2,448	−1,282
1960	19,650	−14,758	4,892	4,616	−1,237	3,379	−2,752	−964	638	5,191	−2,367	2,824
1961	20,108	−14,537	5,571	4,999	−1,245	3,754	−2,596	−978	732	6,484	−2,662	3,822
1962	20,781	−16,260	4,521	5,618	−1,324	4,294	−2,449	−1,152	911	6,127	−2,740	3,387
1963	22,272	−17,048	5,224	6,157	−1,561	4,596	−2,304	−1,309	1,037	7,244	−2,831	4,414
1964	25,501	−18,700	6,801	6,824	−1,784	5,040	−2,133	−1,146	1,161	9,724	−2,901	6,823
1965	26,461	−21,510	4,951	7,437	−2,088	5,349	−2,122	−1,280	1,480	8,378	−2,948	5,431
1966	29,310	−25,493	3,817	7,528	−2,481	5,047	−2,935	−1,331	1,496	6,095	−3,064	3,031
1967	30,666	−26,866	3,800	8,020	−2,747	5,273	−3,226	−1,750	1,742	5,838	−3,255	2,583
1968	33,626	−32,991	635	9,368	−3,378	5,990	−3,143	−1,548	1,759	3,693	−3,082	611
1969	36,414	−35,807	607	10,912	−4,869	6,043	−3,328	−1,763	1,964	3,524	−3,125	399
1970	42,469	−39,866	2,603	11,747	−5,516	6,231	−3,354	−2,038	2,329	5,773	−3,443	2,331
1971	43,319	−45,579	−2,260	12,707	−5,436	7,271	−2,893	−2,345	2,649	2,423	−3,856	−1,433
1972	49,381	−55,797	−6,416	14,764	−6,572	8,192	−3,420	−3,063	2,965	−1,742	−4,052	−5,795
1973	71,410	−70,499	911	21,808	−9,655	12,153	−2,070	−3,158	3,406	11,244	−4,103	7,140
1974	98,306	−103,811	−5,505	27,587	−12,084	15,503	−1,653	−3,184	4,231	9,392	[5] −7,431	1,962
1975	107,088	−98,185	8,903	25,351	−12,564	12,787	−746	−2,812	4,853	22,984	−4,868	18,116
1976	114,745	−124,228	−9,483	29,286	−13,311	15,975	559	−2,558	5,027	9,521	−5,314	4,207
1977	120,816	−151,907	−31,091	32,179	−14,217	17,962	1,528	−3,565	5,679	−9,488	−5,023	−14,511
1978	142,054	−176,001	−33,947	42,245	−21,680	20,565	621	−3,573	6,459	−9,875	−5,552	−15,427
1979	184,473	−212,009	−27,536	64,132	−32,960	31,172	−1,778	−2,935	6,214	5,138	−6,128	−991
1980	224,269	−249,749	−25,480	72,506	−42,120	30,386	−2,237	−997	7,793	9,466	−7,593	1,873
1981	237,085	−265,063	−27,978	86,411	−52,329	34,082	−1,183	144	8,699	13,764	−7,425	6,339
1982	211,198	−247,642	−36,444	83,549	−54,883	28,666	−274	−992	8,829	−214	−8,917	−9,131
1983	201,820	−268,900	−67,080	77,251	−52,410	24,841	−369	−4,227	9,711	−37,123	−9,481	−46,604
1984	219,900	−332,422	−112,522	86,221	−67,469	18,752	−1,827	−8,593	9,881	−94,308	−12,157	−106,466
1985	214,424	−338,863	−124,439	89,991	−64,803	25,188	−2,917	−11,128	10,603	−102,694	−14,983	−117,677
1984:												
I	53,614	−79,415	−25,801	22,860	−15,446	7,414	−281	−1,834	2,630	−17,872	−2,368	−20,240
II	54,590	−83,684	−29,094	21,104	−17,208	3,896	−615	−2,052	2,471	−25,394	−2,439	−27,833
III	55,691	−84,144	−28,453	21,396	−17,991	3,405	−234	−2,332	2,448	−25,166	−3,107	−28,273
IV	56,005	−85,179	−29,174	20,861	−16,823	4,038	−696	−2,375	2,333	−25,874	−4,243	−30,117
1985:												
I	55,324	−80,369	−25,045	18,726	−16,507	2,219	−246	−2,202	2,442	−22,832	−3,280	−26,112
II	53,875	−84,242	−30,367	22,253	−16,804	5,449	−729	−2,864	2,552	−25,959	−3,458	−29,417
III	52,498	−84,173	−31,675	24,502	−16,240	8,262	−619	−3,031	2,609	−24,454	−4,001	−28,455
IV	52,727	−90,079	−37,352	24,509	−15,254	9,255	−1,322	−3,031	2,999	−29,451	−4,244	−33,695
1986:												
I	53,661	−90,120	−36,459	24,216	−17,699	6,517	−1,066	−2,701	2,694	−31,015	−3,023	−34,038
II	55,149	−90,818	−35,669	22,636	−17,311	5,325	−695	−2,395	3,100	−30,334	−4,079	−34,413
III [p]	55,318	−92,987	−37,669	22,482	−16,973	5,509	−624	−2,415	3,096	−32,103	−4,177	−36,280

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[1] Excludes military.

[2] Adjusted from Census data for differences in valuation, coverage, and timing.

[3] Fees and royalties from U.S. direct investments abroad or from foreign direct investments in the United States are excluded from investment income and included in other services, net.

[4] In concept, balance on goods and services is equal to net exports and imports in the national income and product accounts (and the sum of balance on current account and allocations of special drawing rights is equal to net foreign investment in the accounts), although the series differ because of different handling of certain items (gold, capital gains and losses, etc.), revisions, etc.

See next page for continuation of table.

TABLE B-99.—*U.S. international transactions, 1946–86*—Continued

[Millions of dollars; quarterly data seasonally adjusted, except as noted]

Year or quarter	U.S. assets abroad, net [increase/capital outflow (−)]				Foreign assets in the U.S., net [increase/capital inflow (+)]			Allocations of special drawing rights (SDRs)	Statistical discrepancy	
	Total	U.S. official reserve assets [6]	Other U.S. Government assets	U.S. private assets	Total	Foreign official assets	Other foreign assets		Total (sum of the items with sign reversed)	Of which: Seasonal adjustment discrepancy
1946		−623								
1947		−3,315								
1948		−1,736								
1949		−266								
1950		1,758								
1951		−33								
1952		−415								
1953		1,256								
1954		480								
1955		182								
1956		−869								
1957		−1,165								
1958		2,292								
1959		1,035								
1960	−4,099	2,145	−1,100	−5,144	2,294	1,473	821		−1,019	
1961	−5,538	607	−910	−5,235	2,705	765	1,939		−989	
1962	−4,174	1,535	−1,085	−4,623	1,911	1,270	641		−1,124	
1963	−7,270	378	−1,662	−5,986	3,217	1,986	1,231		−360	
1964	−9,560	171	−1,680	−8,050	3,643	1,660	1,983		−907	
1965	−5,716	1,225	−1,605	−5,336	742	134	607		−457	
1966	−7,321	570	−1,543	−6,347	3,661	−672	4,333		629	
1967	−9,757	53	−2,423	−7,386	7,379	3,451	3,928		−205	
1968	−10,977	−870	−2,274	−7,833	9,928	−774	10,703		438	
1969	−11,585	−1,179	−2,200	−8,206	12,702	−1,301	14,002		−1,516	
1970	−9,337	2,481	−1,589	−10,229	6,359	6,908	−550	867	−219	
1971	−12,475	2,349	−1,884	−12,940	22,970	26,879	−3,909	717	−9,779	
1972	−14,497	−4	−1,568	−12,925	21,461	10,475	10,986	710	−1,879	
1973	−22,874	158	−2,644	−20,388	18,388	6,026	12,362		−2,654	
1974	−34,745	−1,467	[5] 366	−33,643	34,241	10,546	23,696		−1,458	
1975	−39,703	−849	−3,474	−35,380	15,670	7,027	8,643		5,917	
1976	−51,269	−2,558	−4,214	−44,498	36,518	17,693	18,826		10,544	
1977	−34,785	−375	−3,693	−30,717	51,319	36,816	14,503		−2,023	
1978	−61,130	732	−4,660	−57,202	64,036	33,678	30,358		12,521	
1979	−64,331	−1,133	−3,746	−59,453	38,752	−13,665	52,416	1,139	25,431	
1980	−86,118	−8,155	−5,162	−72,802	58,112	15,497	42,615	1,152	24,982	
1981	−111,031	−5,175	−5,097	−100,758	83,322	4,960	78,362	1,093	20,276	
1982	−121,273	−4,965	−6,131	−110,177	94,078	3,593	90,486		36,325	
1983	−50,022	−1,196	−5,005	−43,821	85,496	5,968	79,527		11,130	
1984	−23,639	−3,131	−5,523	−14,986	102,767	3,037	99,730		27,338	
1985	−32,436	−3,858	−2,824	−25,754	127,106	−1,324	128,430		23,006	
1984: I	−3,571	−657	−2,029	−885	22,251	−2,947	25,198		1,560	940
II	−20,171	−566	−1,386	−18,220	41,963	−157	42,120		6,040	−962
III	16,443	−799	−1,388	18,630	2,668	−765	3,433		9,162	−3,561
IV	−16,338	−1,110	−717	−14,512	35,885	6,906	28,979		10,570	3,577
1985: I	−510	−233	−807	530	14,247	−11,066	25,313		12,375	1,094
II	−2,793	−356	−1,055	−1,382	25,358	8,486	16,872		6,852	−1,174
III	−5,867	−121	−422	−5,324	35,665	2,577	33,088		−1,343	−3,687
IV	−23,266	−3,148	−540	−19,579	51,837	−1,322	53,158		5,125	3,771
1986: I	−12,898	−115	−250	−12,533	36,620	2,469	34,151		10,316	1,216
II	−25,550	16	−209	−25,357	47,526	14,704	32,822		12,437	−1,505
III p	−29,082	280	−1,346	−28,016	69,133	15,839	53,294		−3,771	−3,993

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[5] Includes extraordinary U.S. Government transactions with India.

[6] Consists of gold, special drawing rights, convertible currencies, and the U.S. reserve position in the International Monetary Fund (IMF).

Note.—Quarterly data for U.S. official reserve assets and foreign assets in the United States are not seasonally adjusted.

Source: Department of Commerce, Bureau of Economic Analysis.

Table B-100.—*U.S. merchandise exports and imports by principal end-use category, 1965–86*

[Billions of dollars; quarterly data seasonally adjusted]

Year or quarter	Exports							Imports						
	Total	Agricultural products	Nonagricultural products					Total	Petroleum and products	Nonpetroleum products				
			Total	Industrial supplies and materials	Capital goods except automotive	Automotive	Other			Total	Industrial supplies and materials	Capital goods except automotive	Automotive	Other
1965	26.5	6.3	20.2	7.6	8.1	1.9	2.6	21.5	2.0	19.5	9.1	1.5	0.9	8.0
1966	29.3	6.9	22.4	8.2	8.9	2.4	2.9	25.5	2.1	23.4	10.2	2.2	1.8	9.2
1967	30.7	6.5	24.2	8.5	9.9	2.8	3.0	26.9	2.1	24.8	10.0	2.5	2.4	9.9
1968	33.6	6.3	27.3	9.6	11.1	3.5	3.2	33.0	2.4	30.6	12.0	2.8	4.0	11.8
1969	36.4	6.1	30.3	10.4	12.4	3.9	3.7	35.8	2.6	33.2	11.7	3.4	5.1	13.0
1970	42.5	7.4	35.1	12.3	14.7	3.9	4.3	39.9	2.9	36.9	12.3	4.0	5.7	15.0
1971	43.3	7.8	35.5	10.9	15.4	4.7	4.5	45.6	3.6	41.9	13.6	4.3	7.6	16.5
1972	49.4	9.5	39.9	11.8	16.9	5.5	5.6	55.8	4.7	51.1	16.0	5.9	9.0	20.2
1973	71.4	18.0	53.4	16.9	22.0	7.0	7.6	70.5	8.4	62.1	19.2	8.3	10.7	23.9
1974	98.3	22.4	75.9	26.2	30.9	8.8	10.0	103.8	26.6	77.2	27.4	9.8	12.4	27.5
1975	107.1	22.2	84.8	26.7	36.6	10.8	10.7	98.2	27.0	71.2	23.6	10.2	12.1	25.3
1976	114.7	23.4	91.4	28.3	39.1	12.2	11.7	124.2	34.6	89.7	29.1	12.3	16.8	31.4
1977	120.8	24.3	96.5	29.7	39.8	13.5	13.5	151.9	45.0	106.9	35.0	14.0	19.4	38.6
1978	142.1	29.9	112.2	33.7	46.5	15.7	16.2	176.0	42.3	133.7	41.3	19.7	25.0	47.7
1979	184.5	35.6	148.9	51.8	58.8	18.4	19.8	212.0	60.5	151.5	48.5	25.0	26.4	51.6
1980	224.3	42.2	182.1	64.9	74.2	17.5	25.4	249.8	79.3	170.5	54.0	31.2	27.9	57.4
1981	237.1	44.0	193.1	63.3	81.6	19.8	28.3	265.1	77.8	187.3	57.4	36.7	30.9	62.3
1982	211.2	37.2	174.0	57.3	73.7	17.4	25.6	247.6	61.3	186.4	50.0	38.3	34.1	63.9
1983	201.8	37.1	164.7	52.2	68.9	18.7	24.9	268.9	55.0	213.9	54.7	43.1	43.5	72.6
1984	219.9	38.4	181.5	56.0	74.1	22.5	28.9	332.4	57.3	275.1	66.6	61.1	56.6	90.9
1985	214.4	29.6	184.8	53.7	75.6	24.5	30.9	338.9	50.5	288.3	62.9	64.0	65.1	96.3
1984: I	53.6	10.0	43.6	13.3	17.8	5.6	7.0	79.4	14.0	65.4	16.2	14.1	13.5	21.7
II	54.6	9.7	44.9	14.1	18.2	5.4	7.1	83.7	14.9	68.7	17.1	15.2	13.9	22.6
III	55.7	9.3	46.4	14.5	18.8	5.7	7.4	84.1	14.1	70.1	16.6	16.0	14.4	23.2
IV	56.0	9.3	46.7	14.2	19.3	5.8	7.4	85.2	14.3	70.8	16.7	15.8	14.9	23.4
1985: I	55.3	8.3	47.0	13.9	19.2	6.0	7.9	80.4	10.4	70.0	15.9	15.8	14.7	23.5
II	53.9	7.5	46.4	13.1	19.1	6.2	7.9	84.2	13.6	70.6	15.8	15.7	15.7	23.4
III	52.5	6.7	45.8	13.3	18.7	6.3	7.5	84.2	12.4	71.8	15.6	15.6	16.7	23.9
IV	52.7	7.1	45.6	13.4	18.6	6.1	7.5	90.1	14.1	76.0	15.6	16.9	17.9	25.5
1986: I	53.7	7.1	46.6	13.7	19.0	6.0	8.0	90.1	10.0	80.1	17.5	17.9	17.8	26.9
II	55.1	6.2	49.0	15.6	19.3	5.9	8.2	90.8	7.8	83.0	17.7	18.8	19.1	27.4
III ^{p}	55.3	6.5	48.8	14.5	20.3	5.6	8.5	93.0	8.0	85.0	16.6	19.3	20.6	28.4

Note.—Data are on an international transactions basis and exclude military shipments.

Source: Department of Commerce, Bureau of Economic Analysis.

TABLE B–101.—*U.S. merchandise exports and imports by area, 1977–86*

[Millions of dollars]

Item	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986 first 3 quarters at annual rate[1]
Exports	120,816	142,054	184,473	224,269	237,085	211,198	201,820	219,900	214,424	218,837
Industrial countries	76,970	87,948	115,930	137,152	141,900	127,254	128,353	140,991	139,008	145,315
Canada	28,533	31,229	38,690	41,626	46,016	39,203	44,512	53,037	53,879	52,344
Japan	10,566	12,960	17,629	20,806	21,796	20,694	21,789	23,241	22,145	26,667
Western Europe	34,094	39,546	54,177	67,603	65,108	59,701	55,448	56,867	56,015	59,313
Australia, New Zealand, and South Africa	3,777	4,213	5,434	7,117	8,980	7,656	6,604	7,849	6,967	6,991
Other countries, except Eastern Europe	40,951	50,213	62,630	82,941	90,657	80,130	70,426	74,587	71,966	71,361
OPEC[2]	12,877	14,846	14,556	17,368	21,097	20,651	15,256	13,771	11,409	10,583
Other[3]	28,074	35,367	48,074	65,573	69,560	59,479	55,170	60,816	60,557	60,778
Eastern Europe	2,895	3,893	5,913	4,143	4,440	3,749	2,976	4,290	3,258	2,161
International organizations and unallocated	......	......	......	33	88	65	65	33	192	......
Imports	151,907	176,001	212,009	249,750	265,063	247,642	268,900	332,422	338,863	365,233
Industrial countries	79,447	99,344	112,797	127,884	144,322	144,139	159,893	205,526	219,881	243,368
Canada	29,864	33,756	39,227	42,901	48,253	48,523	55,982	67,630	71,173	69,940
Japan	18,565	24,540	26,260	31,216	37,597	37,683	42,844	60,210	65,653	79,788
Western Europe	28,226	36,608	41,817	47,235	52,864	52,900	55,623	72,054	77,454	87,933
Australia, New Zealand, and South Africa	2,792	4,440	5,493	6,532	5,608	5,033	5,443	5,632	5,601	5,707
Other countries, except Eastern Europe	70,679	74,397	96,131	119,135	119,188	102,414	107,593	124,679	117,135	119,806
OPEC[2]	35,778	33,286	45,039	55,602	49,934	31,517	25,282	26,852	22,680	19,168
Other[3]	34,901	41,111	51,092	63,533	69,254	70,897	82,311	97,827	94,455	100,638
Eastern Europe	1,127	1,508	1,896	1,444	1,553	1,066	1,413	2,217	1,847	2,059
International organizations and unallocated	654	752	1,185	1,287	......	23	1	......	......	-

[1] Preliminary; seasonally adjusted.

[2] Algeria, Ecuador, Gabon, Indonesia, Iran, Iraq, Kuwait, Libya, Nigeria, Qatar, Saudi Arabia, United Arab Emirates, and Venezuela.

[3] Latin American Republics, other Western Hemisphere, and other countries in Asia and Africa, less members of OPEC.

Note.—Data are on an international transactions basis and exclude military.

Source: Department of Commerce, Bureau of Economic Analysis.

TABLE B-102.—*U.S. merchandise exports and imports by commodity groups, 1966–86*

[Millions of dollars; monthly data for statistical month]

Year or month	Merchandise exports					Merchandise imports					Merchandise trade balance		
	Total domestic and foreign exports[1]	Domestic exports				General imports[5]					Exports less imports, customs value	Exports less imports, f.a.s.	Exports less imports, c.i.f.
		Total[1] [2]	Food, beverages, and tobacco	Crude materials and fuels[3]	Manufactured goods[4]	Total[2]	Food, beverages, and tobacco	Crude materials and fuels[3]	Manufactured goods[4]	Total, c.i.f. value[6]			
	F.a.s. value[7]					Customs value							
1966	29,490	29,054	5,186	4,404	19,218	25,618	4,590	5,718	14,446		3,872		
1967	31,030	30,646	4,710	4,726	20,844	26,889	4,701	5,367	15,756	28,745	4,141		2,283
1968	34,063	33,626	4,592	4,865	23,818	33,226	5,365	6,031	20,624	35,320	837		−1,257
1969	37,332	36,788	4,446	5,006	26,785	36,043	5,308	6,391	23,011	38,241	1,289		−909
1970	42,659	42,025	5,058	6,692	29,344	39,951	6,230	6,542	25,907	42,429	2,708		230
1971	43,549	42,911	5,076	6,441	30,443	45,563	6,404	7,268	30,414	48,342	−2,014		−4,793
1972	49,199	48,399	6,569	7,091	33,740	55,583	7,379	8,838	37,767	58,862	−6,384		−9,663
1973	70,823	69,730	12,938	10,735	44,731	69,476	9,235	13,446	45,001	73,573	1,348		2,752
1974	97,998	96,634	15,233	15,802	63,523	101,394	10,701	31,842	56,202	108,392	−3,396		−10,395
						F.a.s. value[7]							
1974*	98,092	96,679	15,233	15,802	63,523	102,559	10,709	32,064	55,223	110,875		−4,467	−12,783
1975*	107,652	106,161	16,793	15,197	70,951	98,503	9,923	32,596	51,080	105,880		9,149	1,772
1976*	115,223	113,549	17,234	16,095	77,241	123,477	11,891	41,474	64,775	132,498		−8,254	−17,274
1977*	121,232	119,024	15,963	18,579	80,151	150,390	14,227	53,554	76,554	160,411		−29,158	−39,179
1978*	143,681	141,142	20,604	20,957	94,473	174,757	15,743	51,901	100,317	186,045		−31,076	−42,364
1979*	181,860	178,633	24,587	28,222	116,587	209,458	17,735	71,390	112,226	222,228		−27,599	−40,368
1980	220,630	216,515	30,407	33,719	143,891	244,871	18,551	93,973	125,122	256,984		−24,241	−36,354
						Customs value							
1981	233,677	228,899	33,206	33,022	154,283	260,982	18,350	92,873	142,475	273,352	−27,305		−39,675
1982	212,193	207,076	26,977	33,518	139,716	243,952	17,817	74,404	144,022	254,885	−31,759		−42,691
1983	200,486	195,917	26,979	29,555	132,409	258,048	18,819	68,037	163,449	269,878	−57,562		−69,392
1984	217,865	212,034	27,312	31,482	143,142	325,726	21,626	72,758	221,515	341,177	−107,861		−123,312
1985	213,146	206,925	22,226	28,344	145,384	345,276	22,376	64,981	246,778	361,626	−132,129		−148,480
1985:													
Jan	18,673	18,124	2,161	2,671	12,445	28,836	1,932	5,344	20,448	30,245	−10,163		−11,572
Feb	17,143	16,648	1,995	2,580	11,218	25,941	1,817	4,906	18,385	27,169	−8,798		−10,026
Mar	20,330	19,765	1,973	2,562	14,245	28,725	2,128	4,383	21,301	30,107	−8,395		−9,777
Apr	17,973	17,492	1,913	2,441	12,228	28,572	1,804	5,772	20,080	29,907	−10,599		−11,935
May	18,337	17,816	1,603	2,261	12,992	29,302	1,919	5,700	20,725	30,712	−10,965		−12,375
June	18,012	17,433	1,614	2,122	12,759	30,136	1,912	6,054	21,268	31,596	−12,124		−13,584
July	16,727	16,172	1,604	2,033	11,556	27,000	1,641	5,085	19,286	28,312	−10,274		−11,585
Aug	16,584	16,106	1,783	2,258	11,233	26,247	1,719	4,851	18,916	27,512	−9,663		−10,927
Sept	17,034	16,543	1,709	2,115	11,700	31,349	1,903	5,562	22,887	32,860	−14,315		−15,826
Oct	17,618	17,122	1,836	2,285	12,102	28,429	1,598	5,656	20,271	29,695	−10,811		−12,077
Nov	17,721	17,227	2,128	2,559	11,688	30,010	1,865	5,657	21,557	31,371	−12,290		−13,651
Dec	16,994	16,479	1,907	2,459	11,221	30,728	2,138	6,011	21,654	32,141	−13,734		−15,146
1986:													
Jan	17,006	16,501	1,797	2,467	11,393	32,005	2,215	6,234	22,477	33,465	−14,999		−16,459
Feb	17,735	17,164	1,689	2,367	12,182	28,895	1,908	4,741	21,289	30,225	−11,161		−12,491
Mar	18,913	18,349	1,706	2,349	13,325	31,972	2,100	4,284	24,261	33,435	−13,059		−14,522
Apr	17,965	17,376	1,475	2,436	12,615	28,762	2,018	3,176	22,226	30,036	−10,797		−12,071
May	17,431	16,691	1,395	2,228	12,274	30,272	2,329	3,659	23,001	31,638	−12,842		−14,208
June	19,070	16,427	1,438	1,776	12,298	31,764	1,886	4,163	23,971	33,240	−12,694		−14,170
July	17,707	15,911	1,648	1,764	11,623	34,121	2,143	3,963	26,609	35,745	−16,414		−18,037
Aug	17,604	16,831	1,814	2,035	12,042	29,476	1,931	3,413	23,106	30,925	−11,871		−13,321
Sept	17,518	16,860	1,672	1,988	12,253	28,695	1,963	3,874	21,849	30,078	−11,177		−12,560
Oct	19,330	18,594	1,866	2,287	13,367	30,018	1,935	3,514	23,537	31,389	−10,688		−12,059
Nov	18,595	17,895	1,863	2,339	12,755	36,187	2,328	3,866	28,350	37,816	−17,592		−19,221

[1] Department of Defense shipments of grant-aid military supplies and equipment under the Military Assistance Program are excluded through 1984 and included beginning 1985 from total exports.

[2] Total includes commodities and transactions not classified according to kind.

[3] Includes fats and oils.

[4] Includes machinery, transportation equipment, chemicals, metals, and other manufactures. Export data for these items include military grant-aid shipments through 1977 and exclude them thereafter.

[5] Total arrivals of imported goods other than intransit shipments.

[6] C.i.f. (cost, insurance, and freight) import value at first port of entry into United States. Data for 1967–73 are estimates.

[7] F.a.s. (free alongside ship) value basis at U.S. port of exportation for exports and at foreign port of exportation for imports.

Note.—Data are as reported by the Bureau of the Census adjusted to include silver ore and bullion reported separately prior to 1969. Trade in gold is included beginning 1974. Export statistics cover all merchandise shipped from the U.S. customs area, except supplies for the U.S. Armed Forces. Exports include shipments under Agency for International Development and Food for Peace programs as well as other private relief shipments.

Data beginning 1980 include trade of the U.S. Virgin Islands, except that for 1980 Virgin Islands exports are reflected only in the figures for domestic and foreign exports combined, total domestic exports, and trade balance.

*Data for 1974–79 for domestic and foreign exports combined, total domestic exports, total general imports, and trade balance include trade of the Virgin Islands.

Source: Department of Commerce (Bureau of the Census and International Trade Administration, Office of Trade Information and Analysis, Trade Statistics Division).

TABLE B–103.—*International investment position of the United States at year-end, 1978–85*

[Billions of dollars]

Type of investment	1978	1979	1980	1981	1982	1983	1984	1985
Net international investment position of the United States	76.1	94.5	106.0	140.7	136.2	88.5	4.4	–107.4
U.S. assets abroad	447.8	510.6	606.9	719.7	824.9	874.1	898.2	952.4
U.S. official reserve assets	18.7	19.0	26.8	30.1	34.0	33.7	34.9	43.2
Gold	11.7	11.2	11.2	11.2	11.1	11.1	11.1	11.1
Special drawing rights	1.6	2.7	2.6	4.1	5.3	5.0	5.6	7.3
Reserve position in the International Monetary Fund	1.0	1.3	2.9	5.1	7.3	11.3	11.5	11.9
Foreign currencies	4.4	3.8	10.1	9.8	10.2	6.3	6.7	12.9
U.S. Government assets, other than official reserve assets	54.2	58.4	63.5	68.5	74.3	79.3	84.6	87.4
U.S. loans and other long-term assets	52.3	56.5	61.8	67.0	72.7	77.6	82.7	85.6
Repayable in dollars	49.8	54.1	59.6	64.7	70.7	75.7	80.8	83.8
Other	2.4	2.4	2.2	2.3	2.0	1.9	1.8	1.8
U.S. foreign currency holdings and U.S. short-term assets	1.9	1.9	1.7	1.5	1.7	1.7	2.0	1.8
U.S. private assets	375.0	433.2	516.6	621.2	716.6	761.1	778.6	821.8
Direct investment abroad	162.7	187.9	215.4	228.3	207.8	207.2	213.0	232.7
Foreign securities	53.4	56.8	62.7	63.5	75.7	84.3	90.0	114.1
Bonds	42.1	42.0	43.5	45.8	56.7	57.7	62.1	73.4
Corporate stocks	11.2	14.8	19.2	17.7	19.0	26.6	27.9	40.7
U.S. claims on unaffiliated foreigners reported by U.S. nonbanking concerns	28.1	31.5	34.7	35.9	28.6	35.1	30.0	28.2
U.S. claims reported by U.S. banks, not included elsewhere	130.8	157.0	203.9	293.5	404.6	434.5	445.6	446.7
Foreign assets in the United States	371.7	416.1	500.8	579.0	688.7	785.6	893.8	1,059.8
Foreign official assets in the United States	173.1	159.9	176.1	180.4	189.1	194.6	199.1	202.3
U.S. Government securities	128.5	106.6	118.2	125.1	132.6	137.0	143.0	143.7
U.S. Teasury securities	124.0	101.7	111.3	117.0	124.9	129.7	135.5	136.0
Other	4.5	4.9	6.9	8.1	7.7	7.3	7.5	7.7
Other U.S. Government liabilities	12.7	12.7	13.4	13.0	13.6	14.4	14.8	15.3
U.S. liabilities reported by U.S. banks, not included elsewhere	23.3	30.5	30.4	26.7	25.0	25.5	26.1	26.6
Other foreign official assets	8.5	9.9	14.1	15.5	17.9	17.7	15.2	16.7
Other foreign assets in the United States	198.7	256.3	324.8	398.6	499.6	591.0	694.7	857.5
Direct investment in the United States	42.5	54.5	83.0	108.7	124.7	137.1	164.6	183.0
U.S. Treasury securities	8.9	14.2	16.1	18.5	25.8	33.9	58.3	83.8
U.S. securities other than U.S. Treasury securities	53.6	58.6	74.1	75.4	93.6	114.7	128.6	207.8
Corporate and other bonds	11.5	10.3	9.5	10.7	16.8	17.5	32.7	81.8
Corporate stocks	42.1	48.3	64.6	64.6	76.8	97.3	95.8	125.9
U.S. liabilities to unaffiliated foreigners reported by U.S. nonbanking concerns	16.0	18.7	30.4	30.6	27.5	26.9	31.0	29.1
U.S. liabilities reported by U.S. banks, not included elsewhere	77.7	110.3	121.1	165.4	228.0	278.3	312.2	353.8

Source: Department of Commerce, Bureau of Economic Analysis.

Table B–104.—*International reserves, selected years, 1952–86*

[Millions of SDRs; end of period]

Area and country	1952	1962	1972	1982	1983	1984	1985	1986
								November
All countries	49,388	62,851	147,323	360,854	393,979	438,927	437,577	443,447
Industrial countries	38,582	52,535	110,282	211,918	232,234	252,033	254,834	274,102
United States	24,714	17,220	12,112	29,918	30,831	33,517	38,412	[1] 39,594
Canada	1,944	2,561	5,572	3,428	4,016	3,246	2,982	3,214
Australia	920	1,168	5,656	6,053	8,838	7,869	5,528	5,790
Japan	1,101	2,021	16,916	22,001	24,346	27,811	25,173	35,578
New Zealand	183	251	767	577	744	1,824	1,454	[1] 3,041
Austria	116	1,081	2,505	5,544	5,052	5,070	5,080	5,131
Belgium	1,133	1,753	3,564	4,757	5,699	5,853	5,611	5,685
Denmark	150	256	787	2,111	3,515	3,127	4,999	4,125
Finland	132	237	664	1,420	1,227	2,854	3,481	1,340
France	686	4,049	9,224	17,850	21,826	24,227	27,071	[1] 30,386
Germany	960	6,958	21,908	43,909	44,092	44,282	43,735	45,954
Iceland	8	32	78	133	144	132	189	240
Ireland	318	359	1,038	2,390	2,534	2,412	2,689	2,959
Italy	722	4,068	5,605	15,107	21,284	23,549	16,458	18,810
Netherlands	953	1,943	4,407	10,723	11,253	10,961	11,354	11,300
Norway	164	304	1,220	6,272	6,373	9,596	12,711	10,488
Spain	134	1,045	4,618	7,450	7,581	12,709	10,686	[1] 13,415
Sweden	504	802	1,453	3,397	4,065	4,135	5,487	5,889
Switzerland	1,667	2,919	6,961	16,930	17,275	18,520	19,317	17,997
United Kingdom	1,956	3,308	5,201	11,904	11,496	10,297	12,373	15,822
Developing countries: Total	10,272	10,202	36,083	141,071	150,274	170,757	162,033	137,601
By area:								
Africa	1,786	2,110	3,962	7,642	7,304	7,135	8,672	7,330
Asia	3,721	2,658	7,171	36,712	44,534	52,709	47,063	42,989
Europe	966	1,348	6,425	7,063	8,206	9,702	9,779	10,267
Middle East	1,183	1,805	9,436	64,094	62,254	59,637	58,730	49,047
Western Hemisphere	2,616	2,282	9,089	25,560	27,977	41,574	37,788	27,969
Memo:								
Oil-exporting countries	1,699	2,030	9,956	67,163	67,200	69,605	69,325	53,556
Non-oil developing countries	8,573	8,172	26,127	73,907	83,075	101,152	92,708	84,045

[1] Data refer to October 1986.

Note.—International reserves is comprised of monetary authorities' holdings of gold (at SDR 35 per ounce), special drawing rights (SDRs), reserve positions in the International Monetary Fund, and foreign exchange. Data exclude U.S.S.R., other Eastern European countries, and Cuba (after 1960).

U.S. dollars per SDR (end of period) are: 1952 and 1962—1.00000; 1972—1.08571; 1979—1.31733; 1980—1.27541; 1982—1.10311; 1983—1.04695; 1984—.98021; 1985—1.09842; and November 1986—1.21030.

Source: International Monetary Fund, *"International Financial Statistics."*

Table B–105.—*Exchange rates, 1967–86*

[Cents per unit of foreign currency, except as noted]

Period	Belgian franc	Canadian dollar	French franc	German mark	Italian lira	Japanese yen
March 1973	2.5378	100.333	22.191	35.548	0.17604	0.38190
1967	2.0125	92.689	20.323	25.084	.16022	.27613
1968	2.0026	92.801	20.191	25.048	.16042	.27735
1969	1.9942	92.855	19.302	25.491	.15940	.27903
1970	2.0139	95.802	18.087	27.424	.15945	.27921
1971	2.0598	99.021	18.148	28.768	.16174	.28779
1972	2.2716	100.937	19.825	31.364	.17132	.32995
1973	2.5761	99.977	22.536	37.758	.17192	.36915
1974	2.5713	102.257	20.805	38.723	.15372	.34302
1975	2.7253	98.297	23.354	40.729	.15328	.33705
1976	2.5921	101.410	20.942	39.737	.12044	.33741
1977	2.7911	94.112	20.344	43.079	.11328	.37342
1978	3.1809	87.729	22.218	49.867	.11782	.47981
1979	3.4098	85.386	23.504	54.561	.12035	.45834
1980	3.4247	85.530	23.694	55.089	.11694	.44311
1981	2.7007	83.408	18.489	44.362	.08842	.45432
1982	2.1982	81.077	15.293	41.236	.07411	.40284
1983	1.9621	81.133	13.183	39.235	.06605	.42128
1984	1.7348	77.244	11.474	35.230	.05708	.42139
1985	1.6968	73.226	11.220	34.247	.05255	.42248
1986	2.2464	71.959	14.467	46.266	.06730	.59709
1985: I	1.5315	73.875	10.050	30.728	.04949	.38837
II	1.6083	73.013	10.616	32.380	.05074	.39874
III	1.7399	73.524	11.529	35.162	.05285	.41977
IV	1.9074	72.493	12.686	38.719	.05713	.48302
1986: I	2.0829	71.227	13.882	42.633	.06258	.53380
II	2.1830	72.230	14.011	44.577	.06496	.58918
III	2.3209	72.175	14.756	47.990	.06966	.64186
IV	2.3989	72.205	15.221	49.864	.07199	.62352

Period	Netherlands guilder	Swedish krona	Swiss franc	United Kingdom pound	Multilateral trade-weighted value of the U.S. dollar (March 1973=100)	
					Nominal	Real [1]
March 1973	34.834	22.582	31.084	247.24	100.0	100.0
1967	27.759	19.373	23.104	275.04	120.0	....
1968	27.626	19.349	23.169	239.35	122.1	....
1969	27.592	19.342	23.186	239.01	122.4	....
1970	27.651	19.282	23.199	239.59	121.1	....
1971	28.650	19.592	24.325	244.42	117.8	....
1972	31.153	21.022	26.193	250.08	109.1	....
1973	35.977	22.970	31.700	245.10	99.1	98.8
1974	37.267	22.563	33.688	234.03	101.4	99.2
1975	39.632	24.141	38.743	222.16	98.5	93.9
1976	37.846	22.957	40.013	180.48	105.6	97.3
1977	40.752	22.383	41.714	174.49	103.3	93.1
1978	46.284	22.139	56.283	191.84	92.4	84.2
1979	49.843	23.323	60.121	212.24	88.1	83.2
1980	50.369	23.647	59.697	232.58	87.4	84.8
1981	40.191	19.860	51.025	202.43	102.9	100.8
1982	37.473	16.063	49.373	174.80	116.6	111.7
1983	35.120	13.044	47.660	151.59	125.3	117.3
1984	31.245	12.103	42.676	133.56	138.3	128.5
1985	30.370	11.672	41.058	129.56	143.2	132.0
1986	41.008	14.041	55.925	146.68	112.0	103.4
1985: I	27.174	10.789	36.332	111.52	156.5	144.1
II	28.685	11.179	38.565	125.56	149.1	137.0
III	31.253	11.923	42.481	137.63	139.2	128.5
IV	34.367	12.796	46.856	143.53	128.2	118.4
1986: I	37.775	13.487	50.614	144.05	119.5	110.1
II	39.570	13.892	53.652	150.94	114.2	104.5
III	42.562	14.337	59.337	148.77	108.3	99.9
IV	44.126	14.448	60.097	142.98	107.0	98.9

[1] Adjusted by changes in consumer prices.

Source: Board of Governors of the Federal Reserve System.

TABLE B–106.—*Industrial production and consumer prices, major industrial countries, 1962–86*

Year or quarter	United States	Canada	Japan	European Community[1]	France	West Germany	Italy	United Kingdom
	Industrial production (1977=100)[2]							
1962	53.2	46.6	29.2	55.7	50	56.6	49.6	68.4
1963	56.3	49.6	32.5	58.1	56	58.2	54.0	70.7
1964	60.1	54.1	37.7	62.3	60	63.3	56.1	76.4
1965	66.1	58.7	39.2	64.9	61	66.9	58.7	78.6
1966	72.0	63.0	44.2	67.4	64	67.5	65.6	79.8
1967	73.5	65.5	52.8	68.5	66	65.5	70.7	80.4
1968	77.6	69.7	60.8	73.6	68	71.5	74.8	86.5
1969	81.2	74.5	70.4	80.5	75	80.6	77.6	89.5
1970	78.5	75.5	80.1	84.5	79	85.8	82.6	89.9
1971	79.6	79.6	82.3	86.4	84	87.5	82.2	89.5
1972	87.3	85.6	86.8	90.2	88	90.8	86.2	91.1
1973	94.4	94.7	99.0	96.8	95	96.7	94.5	99.2
1974	93.0	97.7	96.7	97.5	98	96.4	98.3	97.3
1975	84.8	91.9	85.5	91.0	91	90.5	89.6	92.1
1976	92.6	97.5	96.1	97.7	98	98.7	100.0	95.1
1977	100.0	100.0	100.0	100.0	100	100.0	100.0	100.0
1978	106.5	103.3	106.4	102.3	102	102.7	101.9	103.0
1979	110.7	109.7	113.9	107.4	107	107.7	108.8	106.9
1980	108.6	108.1	119.2	106.7	106	108.0	114.4	99.8
1981	111.0	108.6	120.4	104.2	106	106.2	112.6	96.4
1982	103.1	99.0	120.9	102.9	104	103.1	108.5	98.2
1983	109.2	104.0	125.1	104.0	105	104.1	105.8	101.7
1984	121.4	112.6	138.9	106.8	106	107.6	109.4	103.0
1985	123.8	118.1	145.1	110.3	107	112.9	110.9	108.0
1986[p]	125.1							
1985: I	123.1	115.8	143.0	108.6	106	111.3	110.6	106.6
II	123.5	117.6	146.1	109.7	106	112.3	111.1	108.9
III	124.0	119.2	146.1	110.3	109	114.1	109.8	108.1
IV	124.7	120.1	144.9	111.2	109	115.0	110.1	108.2
1986: I	125.0	119.2	145.1	110.8	106	114.7	113.2	109.2
II	124.4	118.2	145.3	113.1	109	115.7	114.9	108.7
III	125.0	116.8	144.1	112.5	110	116.2	110.9	110.3
IV[p]	126.0							
	Consumer prices (1967=100)							
1962	90.6	87.7	76.7	84.3	85.4	87.4	79.2	85.1
1963	91.7	89.2	82.5	87.6	89.5	89.9	85.1	86.8
1964	92.9	90.9	85.8	90.7	92.5	92.0	90.1	89.6
1965	94.5	93.1	91.6	94.1	94.8	95.0	94.2	93.9
1966	97.2	96.5	96.3	97.5	97.4	98.4	96.4	97.6
1967	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
1968	104.2	104.0	105.3	103.7	104.5	101.6	101.4	104.8
1969	109.8	108.8	110.9	107.9	111.3	103.5	104.1	110.3
1970	116.3	112.4	119.3	113.2	117.1	107.1	109.2	117.4
1971	121.3	115.6	126.5	120.2	123.5	112.7	114.4	128.5
1972	125.3	121.2	132.3	127.5	131.1	119.0	121.0	137.7
1973	133.1	130.3	147.9	138.2	140.7	127.2	134.0	150.2
1974	147.7	144.5	184.0	156.2	160.0	136.1	159.7	174.3
1975	161.2	160.1	205.8	176.7	178.9	144.2	186.8	216.5
1976	170.5	172.1	224.9	195.2	196.1	150.5	218.1	252.4
1977	181.5	185.9	243.0	214.3	214.5	156.0	255.2	292.4
1978	195.4	202.5	252.3	229.2	233.9	160.2	286.2	316.6
1979	217.4	221.0	261.3	250.0	259.1	166.9	328.5	359.0
1980	246.8	243.5	282.3	280.9	294.2	175.8	398.0	423.6
1981	272.4	273.9	296.2	312.1	332.7	186.9	472.4	473.9
1982	289.1	303.5	304.1	343.3	373.1	196.8	549.4	514.7
1983	298.4	321.0	309.7	373.0	407.9	203.3	631.8	538.3
1984	311.1	335.0	316.5	398.0	439.5	208.2	698.8	565.1
1985	322.2	348.2	323.0	423.3	465.1	212.8	758.9	599.5
1986	328.4	362.8						
1985: I	317.4	343.0	320.1	415.2	456.1	211.8	743.5	582.9
II	321.2	346.8	322.9	423.0	464.4	213.1	760.4	602.9
III	323.6	350.0	322.8	425.3	468.7	212.6	768.7	604.5
IV	326.5	353.2	326.2	429.5	471.4	213.2	786.1	607.5
1986: I	327.3	357.5	324.6	433.4	472.4	213.3	800.4	611.7
II	326.5	360.4	325.6	436.5	475.8	212.7	809.9	619.6
III	328.9	364.7	324.5	438.2	478.5	211.7	815.0	620.3
IV	330.8	368.4						

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[1] Consists of Belgium-Luxembourg, Denmark, France, Greece, Ireland, Italy, Netherlands, United Kingdom, West Germany, Portugal, and Spain. Industrial production prior to July 1981 excludes data for Greece, which joined the EC in 1981. Data for Portugal and Spain, which became members on January 1, 1986 are excluded prior to 1982.

[2] All data exclude construction. Quarterly data are seasonally adjusted.

Sources: Department of Commerce (International Trade Administration, Office of Trade Information and Analysis, Trade Statistics Division) and Department of Labor (Bureau of Labor Statistics).

TABLE B-107.—*Civilian unemployment rate, and hourly compensation, major industrial countries, 1960–86*

[Quarterly data seasonally adjusted]

Year or quarter	United States	Canada	Japan	France	West Germany	Italy	United Kingdom
	Civilian unemployment rate (percent)[1]						
1960	5.5	6.5	1.7	1.6	1.1	3.7	2.2
1961	6.7	6.7	1.5	1.4	.6	3.3	2.0
1962	5.5	5.5	1.3	1.3	.6	2.8	2.7
1963	5.7	5.2	1.3	1.2	.5	2.4	3.3
1964	5.2	4.4	1.2	1.3	.4	2.7	2.5
1965	4.5	3.6	1.2	1.4	.3	3.5	2.1
1966	3.8	3.4	1.4	1.7	.3	3.8	2.3
1967	3.8	3.8	1.3	1.8	1.3	3.4	3.3
1968	3.6	4.5	1.2	2.4	1.1	3.5	3.2
1969	3.5	4.4	1.1	2.2	.6	3.5	3.1
1970	4.9	5.7	1.2	2.5	.5	3.2	3.1
1971	5.9	6.2	1.3	2.7	.6	3.3	3.9
1972	5.6	6.2	1.4	2.8	.7	3.8	4.2
1973	4.9	5.5	1.3	2.7	.7	3.7	3.2
1974	5.6	5.3	1.4	2.9	1.6	3.1	3.1
1975	8.5	6.9	1.9	4.2	3.4	3.4	4.6
1976	7.7	7.1	2.0	4.5	3.4	3.9	5.9
1977	7.1	8.1	2.0	5.0	3.5	4.1	6.4
1978	6.1	8.3	2.[illegible]	5.4	3.4	4.1	6.3
1979	5.8	7.4	2.1	6.0	3.0	4.4	5.4
1980	7.1	7.5	2.0	6.4	2.9	4.3	7.1
1981	7.6	7.5	2.2	7.5	4.1	4.8	10.5
1982	9.7	11.0	2.4	8.3	5.9	5.4	11.4
1983	9.6	11.9	2.7	8.5	7.4	5.9	11.9
1984	7.5	11.3	2.8	9.9	7.8	5.9	11.7
1985	7.2	10.5	2.6	10.4	7.9	6.0	11.3
1986	7.0	9.6					
1985: I	7.3	11.1	2.6	10.5	7.9	5.9	11.4
II	7.2	10.6	2.6	10.4	7.9	5.8	11.3
III	7.2	10.2	2.7	10.4	7.9	6.0	11.3
IV	7.1	10.1	2.9	10.1	7.8	6.3	11.3
1986: I	7.1	9.7	2.7	10.2	7.8	6.3	11.5
II	7.1	9.6	2.8	10.5	7.6	6.5	11.7
III	6.9	9.7	2.9	10.7	7.5	6.1	11.6
IV	6.9	9.4					
	Manufacturing hourly compensation (1977=100)[2]						
1960	36.5	29.7	6.6	15.2	10.5	11.9	24.4
1961	37.6	29.2	7.7	16.8	12.2	13.1	26.1
1962	39.0	28.4	8.8	18.6	13.9	15.5	27.5
1963	40.2	29.2	9.8	20.2	14.8	18.3	28.7
1964	41.9	30.3	11.0	22.0	16.1	20.4	30.5
1965	42.7	31.8	12.4	23.8	17.6	21.8	33.5
1966	44.6	34.4	13.6	25.2	19.1	22.8	36.2
1967	46.9	36.9	15.3	27.0	20.2	25.4	36.8
1968	50.2	39.7	17.8	30.4	21.7	27.1	34.3
1969	53.7	42.7	21.3	30.9	24.1	30.7	37.4
1970	57.4	47.4	25.3	32.6	30.5	36.8	43.2
1971	60.9	52.7	30.2	36.9	35.9	43.1	51.0
1972	64.2	57.6	39.8	44.3	43.4	52.3	60.8
1973	68.8	62.8	54.5	57.9	59.1	66.4	67.8
1974	76.2	74.4	66.4	63.4	69.1	73.9	77.5
1975	85.1	81.7	76.0	88.1	79.9	95.0	98.5
1976	92.1	96.9	81.9	91.5	84.2	89.5	92.4
1977	100.0	100.0	100.0	100.0	100.0	100.0	100.0
1978	108.2	99.5	137.0	123.9	124.8	119.1	128.0
1979	118.6	107.3	139.2	149.4	147.0	143.1	168.8
1980	132.4	118.7	143.2	172.6	160.7	165.3	224.7
1981	145.2	134.3	157.6	155.0	138.6	152.8	223.9
1982	157.5	143.8	146.9	151.1	134.8	154.8	213.0
1983	162.4	154.6	158.6	146.4	134.9	160.6	198.0
1984	[illegible]3.2	149.3	163.3	138.9	126.9	150.6	187.1
1985	176.7	148.9	166.5	143.1	130.1	152.8	194.8

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[1] Civilian unemployment rates, approximating U.S. concepts. Quarterly data for France, West Germany, and United Kingdom should be viewed as less precise indicators of unemployment under U.S. concepts than the annual data. Beginning 1977, changes in the Italian survey resulted in a large increase in persons enumerated as unemployed. However, many also reported that they had not actively sought work in the past 30 days. Such persons have been provisionally excluded for comparability with U.S. concepts; their inclusion would about double the rates shown for Italy.

[2] Hourly compensation in manufacturing, U.S. dollar basis. Data relate to all employed persons (wage and salary earners and the self-employed) in the United States and Canada, and to all employees (wage and salary earners) in the other countries. For France and United Kingdom, compensation adjusted to include changes in employment taxes that are not compensation to employees, but are labor costs to employers.

Source: Department of Labor, Bureau of Labor Statistics.

TABLE B-108.—*Growth rates in real gross national product, 1961–86*

[Percent change]

Area and country	1961–65 annual average	1966–70 annual average	1971–75 annual average	1976–80 annual average	1981	1982	1983	1984	1985	1986 [1]
Developed countries	5.2	4.8	3.7	3.2	1.9	−0.5	2.8	5.0	3.0	2.8
United States [2]	4.6	3.0	2.2	3.4	1.9	−2.5	3.5	6.5	2.7	2.5
Canada	5.6	4.8	5.0	3.1	3.3	−4.4	3.3	4.7	4.0	3.3
Japan	6.8	11.2	4.7	5.0	3.7	3.1	3.2	5.1	4.7	2.7
European Community [3]	4.7	4.5	2.8	3.0	−.2	.3	1.3	2.3	2.2	2.5
France	5.9	5.4	4.0	3.3	.5	1.8	.7	1.6	1.4	2.2
West Germany	4.7	4.2	2.1	3.4	.0	−1.0	1.5	3.0	2.5	3.0
Italy	5.2	6.2	2.5	3.9	.2	−.5	−.4	2.6	2.3	3.1
United Kingdom	3.2	2.5	2.2	1.7	−1.4	1.4	3.5	1.8	3.4	2.5
Developing countries	6.3	6.7	7.0	5.5	1.4	.9	.4	3.0	3.2	2.7
Communist countries [4]	4.4	5.0	4.2	2.8	2.0	2.6	3.6	3.2	3.6	([5])
U.S.S.R.	4.7	5.0	3.0	2.3	1.5	2.5	3.4	1.4	1.2	3.5
Eastern Europe	3.9	3.8	4.9	1.9	−1.0	.9	1.8	3.3	1.4	2.5
China	−.2	8.3	5.5	6.1	4.9	8.3	9.1	12.0	12.0	7.0

[1] Preliminary estimates.
[2] For data as reported by the Department of Commerce (Bureau of Economic Analysis), see Table B–2.
[3] Includes Belgium-Luxembourg, Denmark, Greece, Ireland, and the Netherlands, not shown separately.
[4] Includes North Korea and Yugoslavia, not shown separately.
[5] Not available.

Sources: Department of Commerce, International Monetary Fund, country sources, and Council of Economic Advisers.